

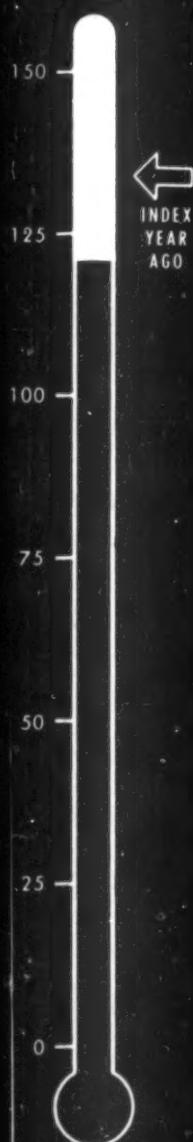
# BUSINESS WEEK

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## How Chrysler Plans

TO GET OUT FROM  
BEHIND THE EIGHT-BALL

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Rohrbach of Raybestos-Manhattan: Rivalry is the key to product development (page 106)

A McGRAW-HILL PUBLICATION

MAR. 27, 1954

GS 85  
E B POWER  
UNIVERSITY MICROFILMS  
313 N Z ST  
ANN ARBOR MI 48106



## The seasons won't wait . . . for breakdowns!

The weather's right . . . the time's right . . . there's not a day to lose! And thanks to the ingenuity and high quality standards of America's farm equipment manufacturers, your hardest working "hired-hand" is ready to roll. ★ This built-in dependability comes, to a large extent, from the use of quality parts, like Bower Spher-O-Honed Bearings. These rugged bearings incorporate exclusive design features—like the one shown at right—which make them last longer and perform better. Highest quality materials plus Bower's close attention to engineering detail have virtually eliminated maintenance. ★ If bearings are important in your product, specify Bower! There's a complete line of tapered, straight and journal roller bearings for every field of transportation and industry.

BOWER ROLLER BEARING COMPANY • DETROIT 14, MICHIGAN



# BOWER

ROLLER BEARINGS



HIGHER FLANGE IMPROVES ROLLER ALIGNMENT

As shown by the red area above, the higher flange provides a large two-zone contact area for the roller heads. This greatly reduces wear—practically eliminates "end play." Larger oil groove provides positive lubrication.



*"Vision is Indispensable to Progress"*

## How an aluminum kettle mirrored the shape of things to come

Today they sheath skyscrapers with aluminum. It's an important metal in airplanes, ships, trains, trucks and busses. Slender aluminum cables share the job of carrying America's light and power.

These are only two of the more than 4,000 uses of this "Twentieth Century Metal"—all stemming directly from the gleaming tea-kettle which in 1891 was the first product of an aluminum foundry.

From that tea-kettle to modern industrial uses was an inevitable step. With new fabricating techniques, lower prices, and a ready supply of

raw material in the bauxite ore which makes up eight percent of the earth's surface, aluminum earned quick acceptance.

Light but strong, corrosion resistant, a good conductor, easily workable, it has become a key material in the transportation, building, electrical, packaging, hardware, and appliance industries. From stoves to

steam shovels, camera films to beer barrels, a metal for today—and tomorrow. In 1954—a U.S. capacity of 1,500,000 tons; twenty years from now—4,500,000 tons.

Aluminum—an example of the progress attained by men of vision working together and another great contributor to America's steady development.

**BANKERS TRUST COMPANY**

16 WALL STREET, NEW YORK 15, N. Y.

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION





## ... too good to burn!

**IT'S COAL** — but a very special kind of hard coal from only *one* vein in the country, hand picked by a trained technician. We will bake it, treat it, make it into tiny but perfect carbon granules and put them inside Bell telephones to help turn voice vibrations into electrical impulses.

**YOU CAN COUNT** on these bits of carbon to last and last . . . and so can your Bell telephone company. This means low upkeep and less cost in the long run; which is the way we want it, too!

**SINCE** Western Electric is the manufacturing unit of the Bell System, our aim is to produce telephone equipment that won't let you down—and to do it so that the price of telephone service may be as low as possible. That's how Western Electric helps to make your Bell service so good and such a good value.



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BUSINESS WEEK • MAR. 27 • NUMBER 1282

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"*Finding a place to live in Rochester was no picnic...*



... Until an officer of the local  
**Marine Midland Bank—The Union  
 Trust Company**—introduced me to  
 the right real-estate people ..."

Guidance and advice are frequently needed when a man is transferred to a new territory. In New York State, help of this kind is often available when The Marine Midland Trust Company of New York is your bank.

In 9 principal trading regions of New York State, affiliated Marine Midland banks have 125 offices in 61 towns and cities. Each officer knows his own area and the people in it as only a local resident can. Let us show you how this "next-door-neighbor" knowledge can be useful to your business.

**The**  
**MARINE MIDLAND**  
**TRUST COMPANY**  
*of New York*

120 BROADWAY • NEW YORK  
 Member Federal Deposit Insurance Corporation

# NEW YORK LIFE

## EXAMPLE NO. 1

The owner of a business, say age 35, purchases this \$10,000 Whole Life policy for a premium outlay of only \$235.90 a year. This would not only protect his family against business losses in the event of his death, but would, while he lives, quickly provide him with extra cash resources and help him enjoy better credit ratings.

As you can see from the chart below, in 20 years his policy could have more cash available than his total premiums.



## EXAMPLE NO. 2

Two partners, for instance, one age 45, one 35, each with a \$50,000 share in a business, become insured for \$50,000 each under two Whole Life policies at a total premium of \$2,861.50 a year. Thus, if either partner dies, his heirs get \$50,000 *in cash*. The surviving partner retains the entire business according to a previously written buy-and-sell agreement. If both live, their policies have sizable cash values as a backlog for loans, credit extension or business expansion.

### 20-YEAR ILLUSTRATION—\$10,000 FACE AMOUNT

Premiums shown are for standard insurance without waiver of premium or double indemnity benefits.  
Policies with these benefits are available at slightly higher rates.

AGE AT ISSUE	ANNUAL PREMIUM	TOTAL ANNUAL PREMIUMS 20 YRS.	GUARANTEED CASH VALUE AT END OF 20 YRS.	TOTAL ACCUMULATED DIVIDENDS 20 YRS.* PLUS TERMINATION DIVIDEND	TOTAL VALUE END OF 20 YRS.*
25	\$175.90	\$3518.00	\$2890.00	\$ 970.00	\$3860.00
35	235.90	4718.00	3710.00	1230.00	4940.00
45	336.40	6728.00	4640.00	1600.00	6240.00
55	504.60	10092.00	5590.00	2230.00	7820.00

\*Assuming that all premiums called for in the policy are paid in full and all dividends are accumulated, based on the Company's 1954 Dividend Illustration Scale and Interest Rate, and that the policy is surrendered at the end of twenty years. This is not a guarantee, estimate or promise of dividends or results.

### NOTE THESE SPECIAL FEATURES!

**Issued to age 70.** Moreover, an applicant who may not be able to qualify for standard insurance for reasons of health or occupation may be insurable under this policy at a higher rate.

**Readily transferable.** Under a transfer of ownership provision unique in New York Life policies, the owner can have his policy and all

rights under it transferred to a new owner whose name will be endorsed on the policy. This feature is especially desirable for buyers of business life insurance.

**Liberal and flexible optional settlements.** The optional methods of settlement provide high guaranteed incomes and are unusually flexible to meet the needs of businessmen as recognized by their lawyers and accountants.

# announces a great new policy for all types of **BUSINESS LIFE INSURANCE**

*Now! Low-cost life insurance that builds up  
high cash values fast while it protects your business!*

New York Life's new "Whole Life" insurance policy was designed especially to meet the growing need on the part of business and professional people for *large-amount life insurance coverage at low net cost.*

Since the minimum face amount of the policy is \$10,000, certain economies are possible which make the premiums remarkably low.

Yet low as the premiums are, this policy

builds high cash values in the early years—actually equal to the full reserve by the end of the seventh year. It is this combination of low cost and rapidly growing cash and loan values that makes it the ideal policy both for *business insurance* and for *family protection plans*. Your New York Life agent will be glad to give you all the facts. See him today or mail the coupon below.

**SEND FOR ALL  
THE FACTS TODAY**

**NEW YORK LIFE  
INSURANCE COMPANY**

**New York Life Insurance Company, Dept. BW  
51 Madison Avenue, New York 10, N. Y.**

Please furnish me, without any obligation, full information on your new Whole Life insurance policy, minimum amount \$10,000.

NAME \_\_\_\_\_ AGE \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_

# How to save \$10,000 worth of executive time in 10 minutes

*If you are looking  
for a plant location—*

. . . a ten-minute trip across this page may save  
you \$10,000, or more in executive time.

Just take a pencil and check the plant-site factors you consider important. Then accept our invitation for a confidential conference to discuss the specific details of the checked factors essential to the future success of your business.

It's a simple short cut that can easily save you time and money, and assure your new plant of every possible advantage.

Check this list of Plant Location Factors to get the combination you need.

For that just right plant site—  
Look to the American Gas and Electric  
area of industrial opportunity

#### OPERATING SUBSIDIARIES

APPALACHIAN ELECTRIC POWER COMPANY  
INDIANA & MICHIGAN ELECTRIC COMPANY  
KENTUCKY AND WEST VIRGINIA POWER COMPANY, INC.  
KINGSPORT UTILITIES, INC.  
THE OHIO POWER COMPANY  
WHEELING ELECTRIC COMPANY

Check this list of

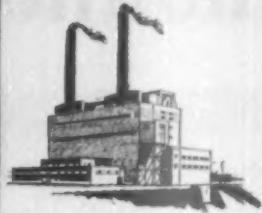


#### ACCESS TO MARKETS

Is nearness to markets important?

IMPORTANT

The AGE System runs through the heart of industrial America—serving important manufacturing and population centers in Michigan, Indiana, Ohio, Kentucky, West Virginia, Virginia, Tennessee.



#### POWER

Is power important to your operation?

IMPORTANT

AGE is one of the largest, most modern private power systems in the world. It offers unlimited power, day and night, for any type of industrial operation.



#### FUEL

Is fuel important to your operation?

IMPORTANT

Approximately 50% of the bituminous coal produced in the U. S. is mined along the AGE System. AGE territory also has many natural gas areas, and important oil and gas pipelines to tap from.

#### MINERALS

Are certain minerals important?

IMPORTANT

AGE offers an abundance of more than 20 important minerals, including:

<input type="checkbox"/>	COAL	<input type="checkbox"/>	IRON
<input type="checkbox"/>	SALT	<input type="checkbox"/>	OIL
<input type="checkbox"/>	SAND	<input type="checkbox"/>	ZINC
<input type="checkbox"/>	LEAD	<input type="checkbox"/>	GAS
<input type="checkbox"/>		<input type="checkbox"/>	MANGANESE



#### LABOR

Do you need a specific type of labor?

AGE territory includes a huge pool of the finest types of labor, both male and female:

<input type="checkbox"/>	TECHNICAL	<input type="checkbox"/>	SKILLED
<input type="checkbox"/>	MECHANICAL	<input type="checkbox"/>	UNSKILLED



#### TRANSPORTATION

Is economical access to sources of raw materials and large markets an advantage to you?

IMPORTANT

AGE offers you a unique balance between raw materials and markets. It also offers 18 main line railroads, rivers, thousands of miles of modern highways, and leading airlines facilities—assuring you the most advantageous position on transportation rates and delivered cost of your products.

## Plant Location Factors to get the combination you need.

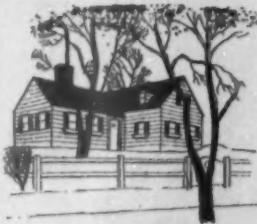


### CLIMATE

Are climatic conditions a factor in your business?

IMPORTANT

The seven-state area served by the AGE System—stretching from Lake Michigan to the North Carolina border—offers a wide range of climatic conditions from which to choose the one that meets your requirements.



### LIVING CONDITIONS

Are living conditions important?

IMPORTANT

AGE territory offers you 2290 communities, adequate housing, a wide range of living conditions to choose from.



### FORESTRY

Are woods and other forest products important?

IMPORTANT

There are thousands of square miles of forest in AGE territory including pulp woods and soft and hard woods for many uses.

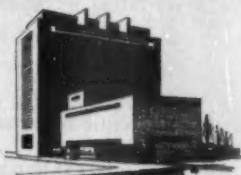


### ACCESS TO SEAPORTS AND LAKEPORTS

Is access to major seaports or lakeports an advantage to you?

IMPORTANT

AGE can offer you easy access to 4 major Atlantic seaports and ports on 2 Great Lakes.



### DISTRIBUTION FACILITIES

Are distribution facilities important?

IMPORTANT

Excellent storage and warehouse facilities and other efficient aids to the movement and transfer of goods are available in AGE territory.

### REASONABLE TAX RATES

Is a favorable tax structure important?

IMPORTANT

AGE territory offers a choice of favorable tax structures. Your special requirements will be carefully analyzed.

## MEMO

FROM THE MANAGER  
OF AREA DEVELOPMENT DIVISION

AMERICAN GAS AND ELECTRIC COMPANY  
30 CHURCH STREET, NEW YORK 8, N.Y.  
TELEPHONE, CORTLANDT 7-5920

To Executives of Expanding Industries:

If you will write, or call me, I'll be glad to arrange confidential conferences with executives familiar with the resources of our territory. They are experienced in briefing plant locations according to the needs of individual industries. There will be no obligation. All we have to sell is power—more than enough to meet the needs of all industries now located or that may want to locate on our lines because of the economic advantages the AGE area offers.

Sincerely yours,

*Lee L. Davis*

Lee L. Davis



Are recreational facilities an important consideration?

IMPORTANT

The AGE territory offers excellent recreational facilities—good camping, proximity to National Parks, lakes and rivers, good fishing and hunting, modern highways, historical spots, high hills and deep valleys.



### WATER

Is water for processing important?

IMPORTANT

AGE territory offers 18 rivers and abundant ground water for processing.



**REVOLUTIONIZING  
FLOOR PAINTING  
THROUGHOUT THE NATION**

A like-new floor, ready to use in one hour—that's Steelcote's great new development in surface maintenance chemistry. Whether you choose black, white or colors, you get a glossy floor finish, hard and tough for the roughest treatment and resistant to abrasion, acids, alkali and oil. To save time, money and inconvenience on your next floor painting job, mail coupon now for complete facts about this amazing product. Jobbers in all principal areas.



**CLIP COUPON**

To your letterhead and mail to:  
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Please send us information on

- Steelcote Quick X floor Coating
- Other Steelcote Specialized Products for surface maintenance
- Analysis of our paint problems.

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ONE HOUR FLOOR COATING

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**Steelcote**

DEVELOPERS - MANUFACTURERS

Product Finishing and Surface Maintenance Products  
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## READERS REPORT

### The Wandering Filament

Dear Sirs:

In your article entitled Lead Battery Defends Its Title [BW—Mar. 13'54, p80], you state: "The battery can produce just one-millionth of a watt—scarcely enough to warm the filament of a flashlight battery."

I have a suspicion that you are referring to the bulb rather than the battery.

RICHARD M. GORDON

J. K. LASSER & CO.  
NEW YORK, N. Y.

Dear Sirs:

. . . Could this be one of the changes of the atomic age?

GEORGE T. COOPER  
BRISTOL, R. I.

• Reader Gordon's suspicion is right; reader Cooper's—so far as we know—wrong.

Dear Sir:

. . . AD-X2 is not a flurry and has not blown over. It is presently being marketed internationally.

JESS M. RITCHIE

PRESIDENT  
PIONEERS, INC.  
OAKLAND, CALIF.

### On Natural Gas

Gentlemen:

This is to thank you for the very nice article Pumping Up Sales [BW—Feb. 27'54, p44], about our efforts to develop an area for irrigation and a new phase in the natural gas business.

We have received some very fine comments on the article, which was concise and factual and very much appreciated by all concerned.

A. J. SIGEL

KANSAS-NEBRASKA NATURAL GAS CO., INC.  
HASTINGS, NEB.

### City Studies

Dear Sir:

Your article Denver Figures [BW—Feb. 13'54, p94] gave us a shocking realization that we have been negligent in our own publicity.

San Diego, which lays claim to being the "growingest" big city in the U. S., has had a research organization similar to Denver's in operation for more than a year. The Economic Research Bureau of San Diego is a non-profit organization jointly financed and sponsored by the governments of the city and county



*Is there a press built  
for bigger returns on  
die investments?*

## DANLY PRESSES help increase die life

Costly dies prepared for stamping motor armature laminations represent an investment that must pay off in production efficiency. Along with die design and material handling methods goes the selection of the *right presses* to insure this die performance.

Danly's *rigid, balanced, precise construction* decreases vibration and deflection, increases die life. In General Electric's plant at Erie, Pa., Danly Autofeed Presses are helping to make investment in lamination dies pay off. The slide to bed parallelism of these Presses was set to a total variation of only .002" at installation. After two years of operation, this original setting has not varied!

There are basic reasons for Danly Press *precision* performance . . . and definite reasons why management finds it pays to be *cost* conscious instead of *price* conscious in purchasing mechanical presses. If your manufacturing process involves high production and expensive dies, it will probably be worth your while to talk with a Danly Press Engineer. Call one now—he will be glad to discuss your specific problems. There is no obligation for this service.

### PROVED AGAIN . . .

**It costs less to run a DANLY PRESS!**



MECHANICAL PRESSES . . . 50 TO 3000 TONS  
SINGLE, DOUBLE, TRIPLE ACTION  
AUTOFEED . . . UNDERDRIVE

**DANLY MACHINE SPECIALTIES, INC.**  
2100 South Laramie Avenue, Chicago 50, Illinois



HERE MAY BE THE  
SOLUTION TO YOUR

## Product Design PROBLEMS

Many companies are finding it quite helpful to call in the Lamb Electric district engineer for suggestions, when designing a new motor-driven product or redesigning an existing one.

Through close cooperation between the manufacturer's engineering department and Lamb Electric engineers, such advantages as reduced costs, improved appearance, greater compactness and lower weight are often obtained.

The time to realize the full benefit of this teamwork is while your product is still in the blueprint stage.

**THE LAMB ELECTRIC COMPANY**  
KENT, OHIO

In Canada: Lamb Electric—Division of Sangamo Company Ltd.—Leaside, Ontario

THEY'RE POWERING AMERICA'S *FINEST* PRODUCTS

*Lamb Electric*

SPECIAL APPLICATION  
FRACTIONAL HORSEPOWER MOTORS

of San Diego and the San Diego Chamber of Commerce.

ALAN B. McGREW  
SAN DIEGO CHAMBER OF COMMERCE  
SAN DIEGO, CALIF.

### City Manager

Dear Sir:

There is some talk in Joliet of attempting to install the city manager type of municipal government. Your article How a City Manager Earns His Keep [BW—Mar. 6 '54, p68] seems especially interesting in this connection, and I am wondering whether we might have permission to reprint it.

DAN ALBRECHT

MANAGING EDITOR  
THE JOLIET HERALD-NEWS  
JOLIET, ILL.

Dear Sir:

We are in a council-manager struggle in Tulsa, and the right to reproduce your pictures and part of your text will help our side win with the manager plan.

VICTOR F. BARNETT  
THE TULSA TRIBUNE  
TULSA, OKLA.

### They Were Slighted

Dear Sir:

A comparison of our annual report with the figures used in your table [BW—Feb. 20 '54, p26] will show a wide difference in North American's actual sales and earnings for both 1952 and 1953.

The story on guided missiles [BW—Feb. 27 '54, p78] was quite interesting. However, the article, in listing West Coast companies engaged in missile work, did not name North American. The company has been doing missile work since 1946, and is one of the largest Air Force contractors in this field.

EDWARD J. RYAN  
DIRECTOR OF PUBLIC RELATIONS  
NORTH AMERICAN AVIATION, INC.  
LOS ANGELES, CALIF.

• North American's annual report shows that in the fiscal year ended Sept. 30, 1953, sales were \$634,688,156 and net income was \$12,773,361. These compare with sales of \$315,270,855 and income of \$7,820,886 in the 1952 fiscal year.

Gentlemen:

We note with interest the article covering architectural porcelain [BW—Feb. 6 '54, p126], and we are pleased, indeed, that our industry benefits by this story.

However, we are disturbed, and of course disappointed, that our name was not included along with others named as being prominent in the field of architectural porcelain. . . . We have been



J-M Movable Walls in both solid panels and panels with glass openings are combined to create this attractive and efficient office

## Make your space fit your needs!

**Johns-Manville Asbestos Movable Walls provide offices when and where you want them**

YOU can rearrange existing offices or partition new space quickly and economically with Johns-Manville Asbestos Movable Walls.

These flush-type, asbestos panels have a clean, smooth surface that's hard to mar, easy to maintain . . . and extra strong to withstand shock

and abuse. Also, they are light in weight, easy to install and relocate. The "dry wall" method of erection assures little or no interruption to normal business routine.

Johns-Manville Asbestos Movable Walls may be used as ceiling-high or free-standing partitions. The

complete wall, including doors, glazing and hardware, is installed by Johns-Manville's own construction men under the supervision of trained J-M engineers—responsibility is undivided.

An estimate will convince you that the cost of J-M Movable Walls compares favorably with other types of wall construction. For details write Johns-Manville, Dept. BW, Box 158, N. Y. 16, N. Y. In Canada write 199 Bay St., Toronto 1, Ont.

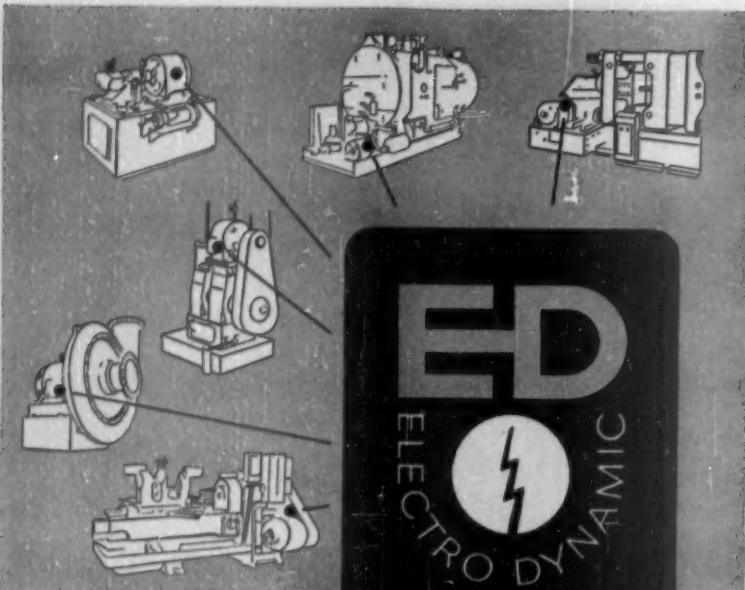


**Johns-Manville**

ASBESTOS

*Movable Walls*

INSTALLED NATIONALLY BY JOHNS-MANVILLE



## THIS EMBLEM IDENTIFIES EXTRA DEPENDABLE INDUSTRIAL MACHINERY



I to 250 hp. AC and  
DC. Standard or  
special purpose.  
N.E.M.A. standards.

**ELECTRO**  
*xtra*  
**DYNAMIC**  
*dependable motors*

**ELECTRO DYNAMIC • Division of General Dynamics Corporation**  
173 Avenue A, Bayonne, New Jersey

Please send me a copy of "MOTOR SHOWDOWN" and the new catalog of Electro Dynamic industrial motors.



NAME \_\_\_\_\_  
COMPANY \_\_\_\_\_  
ADDRESS \_\_\_\_\_

engaged continuously in the porcelain  
enameling of steel since 1901.

J. F. INGRAM

PRESIDENT

INGRAM-RICHARDSON MFG. CO.  
BEAVER FALLS, PA.

### The Wrong Words

Dear Sir:

I think perhaps you have not chosen quite the right words in your picture caption [BW—Mar. 6 '54, p86], which says of Attorney General Brownell that "he meets a payroll of 30,000 workers." That phrase usually connotes not only the supervision of a staff but also the necessity of finding money to pay it. Great as are the responsibilities of the Attorney General's office, this particular burden is one which he is not required to bear.

I would not ordinarily be so sensitive on this subject, but this is the second week of March and, in addition to meeting my own payroll, I have just sent the Director of Internal Revenue a check to help meet Mr. Brownell's.

C. D. GEER

G-V CONTROLS, INC.  
EAST ORANGE, N. J.

- Reader Geer is right. In this respect, if none other, the Attorney General is a very lucky man.

### Co-op Advertising

Dear Sir:

I've just been reading BUSINESS WEEK's article on cooperative advertising in the automotive field [BW—Nov. 21 '53, p41]. My impression is that practically every newspaper in the country now charges the national rate for all new car advertising, regardless of whether it carries the dealer's name or the manufacturer's. Also—and I'm quite sure of this—no newspaper accords an agency 15% commission on its local rates.

IRVIN S. DOLK  
LAMPORT, FOX, PRELL & DOLK, INC.  
SOUTH BEND, IND.

- True.

### Kalamazoo and Keokuk

Dear Sir:

Keokuk has a catchy name which has brought the town renown as a typical middle-sized community. But couldn't the writer of Need for New Schools—No End in Sight [BW—Mar. 6 '54, p118] have used Kalamazoo or Punxsutawney instead?

MORT REED, JR.  
BURNETT & LOGAN  
CHICAGO, ILL.

- Keokuk rolls so neatly off the tongue.



## In the Prime!

These steers being loaded at a western feed lot are in perfect condition—and they'll stay that way all the way to market.

The Milwaukee Road carries thousands of carloads of livestock for the tables of America. They don't exactly "ride the plush," but we see to it that the cars they ride in are good cars and that the animals reach their destination without injury or loss of weight.

It is part of the Milwaukee's creed to protect the investment of the shippers it serves. Whatever the commodity, every effort is made to get it to destination in good condition and with all possible dispatch.

Manufacturers, wholesalers and other shippers! Like the stockmen, you will find Milwaukee Road service much to your liking. Call your nearest Milwaukee Road agent today.

### SHIP-TRAVEL



Route of the Super Dome Hiawathas



### Industrial Sites

If you are looking for a site for your business, ask us. We have many desirable locations.

Chicago, Milwaukee, St. Paul and Pacific Railroad

What is there about Wausau, Wisconsin, that makes it the ideal home for one of the world's most important insurance companies?



Mr. Ross (seated, left) has a friendly "Kaffeeklatsch" with Pres. W. G. Whyte and V. Pres. M. C. Engstrom (standing) of Wausau's First American State Bank—a correspondent of the Chase National.



*Employers Mutuals asked a visiting New York banker for his comments. Here is his story:*

# Wausau Story

By FRANCIS G. ROSS, Vice President  
Chase National Bank, New York

- There's a "personality" about Wausau. It's a personality you like.

You feel it when you visit Wausau's First American State Bank and have a cup of coffee (in the board room!) with some of the officers. You feel it when they tell you what they did during Christmas week. A full-time organist played Christmas music in the lobby, and school children came in and serenaded the bank's customers with carols.

You feel it when you meet Wausau businessmen—when you see Ed Seim, for example, standing out in front of his haberdashery nodding and chatting with passers-by.

You feel it when you drop over to "The Mint," Milt Mueller's popular Wausau restaurant where shoppers and Third street businessmen gather for their morning coffee. Hearing I was visiting from New York, Milt insisted on our having a cup of coffee "on the house."

You feel it when Robert Hagge tells you about the Community Chest Drive he headed up this year. They brought in \$98,000—a mighty good showing for a city of 9000 families. Robert added proudly that 100% of the employees of his own company, Employers Mutuals, gave to the Fund.

You feel this "personality" about Wausau. And you know that Employers Mutuals naturally absorbed that personality, made it the measure of a way of doing business. And how could a company with such a spirit help but succeed in a country like this where most of us are "Wausau" basically—and like it that way?

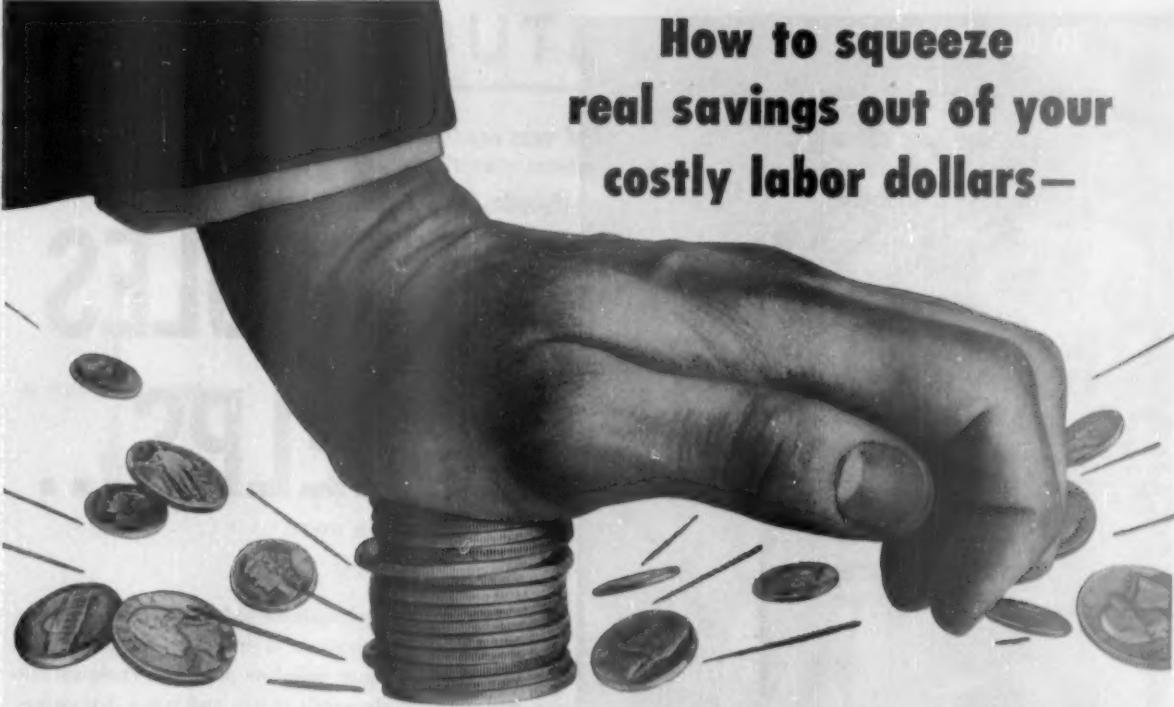
## Employers Mutuals of Wausau are "good people to do business with."

*There's a little bit of Wausau on the sidewalks of New York—and in all the 89 cities where this Company has offices. We write all lines of fire and casualty insurance—everything but life insurance. Our largest line is workmen's compensation. We have two reputations, born and raised in Wausau, that we aim to hold. The first is*

that we'd rather prevent than just pay for an accident. Our accident-prevention program, second to none, means lower insurance costs to policyholders. The second is claim service. Handled direct by our branches, this service is unexcelled in the insurance field for care and fairness, with a signal record for prompt payments.

# Employers Mutuals of Wausau





**How to squeeze  
real savings out of your  
costly labor dollars—**

# Simplify and Save **THE PURE OIL WAY!**

## **6-WAY SAVINGS!**

1. Simplifies Lubrication
2. Speeds-Up Application
3. Minimizes Mis-application
4. Cuts Down Inventories
5. Eases Stock Control
6. Streamlines Purchasing

Be sure with Pure—Sales offices located in more than 500 cities in Pure's marketing area.

Chances are, you can save real money on costly *man-hours* and *machine maintenance* by *simplifying* your lubrication schedule right down the line from purchasing to application.

Scientifically formulated to do many jobs equally well, Pure Oil's *money-saving lubricants* reduce inventories from many different oils and greases to a few *multi-purpose lubricants*.

Pure Oil multi-purpose lubricants not only cut down the number of lubricants but also eliminate the danger of mis-application and time-consuming identification of single purpose oils and greases.

Put this money-saving program to work in your plant! Write for our free booklet giving you full details.

*It Starts Here!*



# **PURE OIL INDUSTRIAL LUBRICANTS**

### **FREE BOOKLET**

The Pure Oil Company, Industrial Sales Dept. B-43  
35 E. Wacker Drive, Chicago 1, Illinois  
Please send me your free booklet on how to "Simplify and Save".

NAME \_\_\_\_\_

POSITION \_\_\_\_\_

COMPANY \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_





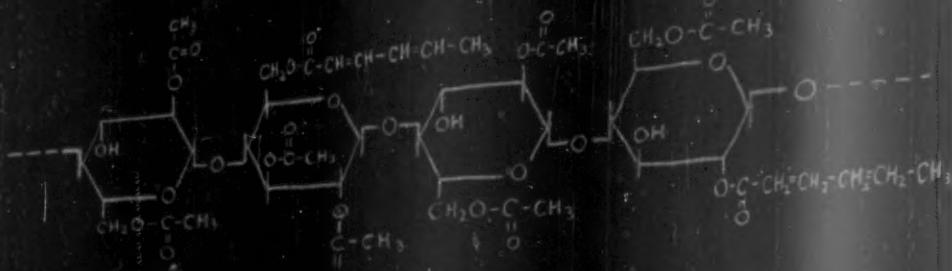
A new Hercules plant under construction at Burlington, New Jersey, will make the essential raw material for Canadian production of 'Terylene'—polyester yarn. Known as dimethyl terephthalate, or DMT, this basic chemical for polyester fibers will be made by an entirely new process, and will be available eventually for plastics and other uses.

# HOW HERCULES HELPS...



Hercules' business today helps almost everyone's business. It embraces the production of synthetic resins, cellulose products, chemical cotton, terpene chemicals, rosin and rosin derivatives, chlorinated products, and many other chemical processing materials—as well as explosives. Through close cooperative research with its customers, Hercules has helped improve the processing or performance of many industrial and consumer products. If you are a manufacturer, we welcome the opportunity to work with you.

## TO IMPROVE CELLULOSE POLYMERS



Hercules now offers Hercose®S (cellulose acetate sorbate), a new film-former. Widely soluble, it can be applied as tough, flexible coatings and cured to insoluble condition. Hercose S films have excellent resistance to heat and low temperatures. It is another in the diverse group of Hercules cellulose chemicals offered many industries. Write for details.

684-8

**HERCULES**

**HERCULES POWDER COMPANY** 968 Market Street, Wilmington 99, Del.

# BUSINESS OUTLOOK

BUSINESS WEEK

MAR. 27, 1954



Spring pickups may be in the air for some lines of business, although the signs aren't very conclusive as yet (page 27).

It's too early, though, to expect a general turnaround.

Numerous basic lines—notably steel—still are grumbling about the failure of the expected orders to appear. Inventories were larger than a lot of people were willing to admit, and the "adjustment" isn't over.

—●—  
Weather in the East this week felt just a little more like spring—and the improvement came none too soon.

With Easter late this year, stores still can hope for the best.

But it takes some fortitude. New York City stores last week, with the icy fringes of winter still chilling shoppers, saw volume fall 10% below a year ago. The previous week, they had run 5% behind.

Gotham's case may not be typical, but it at least is important.

As one big merchandiser adds it up: Sears, Roebuck reported this week that March wasn't coming up to expectations, that volume probably would be down 12% to 13% from a year ago. (February was off 10.6%).

Congressional action on the excise taxes may give merchants just that little additional lift they need.

Sales of watches, jewelry, luggage, handbags—luxury items or simply those subjected to the "luxury" taxes—had been lagging. Prospective buyers were waiting to see if the tax would come off or be cut.

But, you ask, isn't a sale after Easter just as good as one before? Not necessarily. Slow-moving items, by that time, will be sale-priced.

—●—  
Prices of basic raw materials—not to mention common stocks—have been making their bid as harbingers of spring.

It had looked, until this week's dip, almost as though the script writers had forgotten to tell the markets about the recession.

Everyone knows the bumptious role the stock market has been assuming. And commodities tried to break into the act early in March.

If the inventory situation had about worked itself out, you might well expect the markets to give you one of the first signals. (Stocks led the way in 1949; commodities joined early in 1950.)

The danger here is of false signals. That's why Tuesday's last hour drop in stock prices and softening commodities should counsel caution.

The six-month rise in the stock market, it should be remembered, may not be related even remotely to 1954 business.

Investors have been showing faith in the future—a faith they hadn't felt in 20 years. Many are willing simply to ignore short-term changes in corporate earnings and dividends in the hope of a better long-run tax break.

Under such circumstances, a 5% return on equity capital can look attractive now where 7% may have been cold-shouldered two years ago.

# BUSINESS OUTLOOK (Continued)

BUSINESS WEEK

MAR. 27, 1954

Investment psychology hardly slops over into commodities; their prices should be a measure of what is going on now.

The problem is that government activity has been distorting the price picture without really strengthening it—things like locking up the farm surpluses and stockpiling metals that are in oversupply.

Such actions had a good deal to do with price strength during March.

Weather suddenly took a major hand in the markets for farm produce this week. With the critical season at hand for winter wheat, precipitation was general in the powder-dry Great Plains.

Wheat futures dropped sharply, and rye and soybeans tumbled, too.

Petroleum people are blowing hot and cold on the prospects for product prices—with gasoline wars breaking out here and there.

Storage stocks of gasoline are about 180-million bbl. as the big consuming season starts, 20-million above last year's record breaker. And some producers are trimming their estimates on the rise in demand.

Refining activity has been reduced, however. McGraw-Hill's National Petroleum News expects this year's operations to average 87% to 88% of capacity against a high at one point in 1953 of 97%.

Construction won't be handicapped for lack of lumber; supplies haven't been so comfortable in years.

Stocks at mills and concentration yards—totaling about 9-billion bd. ft. as the building season gets rolling—are the largest since 1940 and about 10% higher than a year ago.

Tire manufacturers had nearly 15-million casings in stock at last report. While that was down about 5% from December's peak, it was the highest total ever reported for this time of year.

Yet nobody professes to see much danger in stocks of such size.

New car production should now be building up to the year's peak. Replacement demand will rise, too, with spring weather.

Natural rubber has improved its position against synthetic since its price has come down to give it the competitive edge (although combined use is substantially below a year ago).

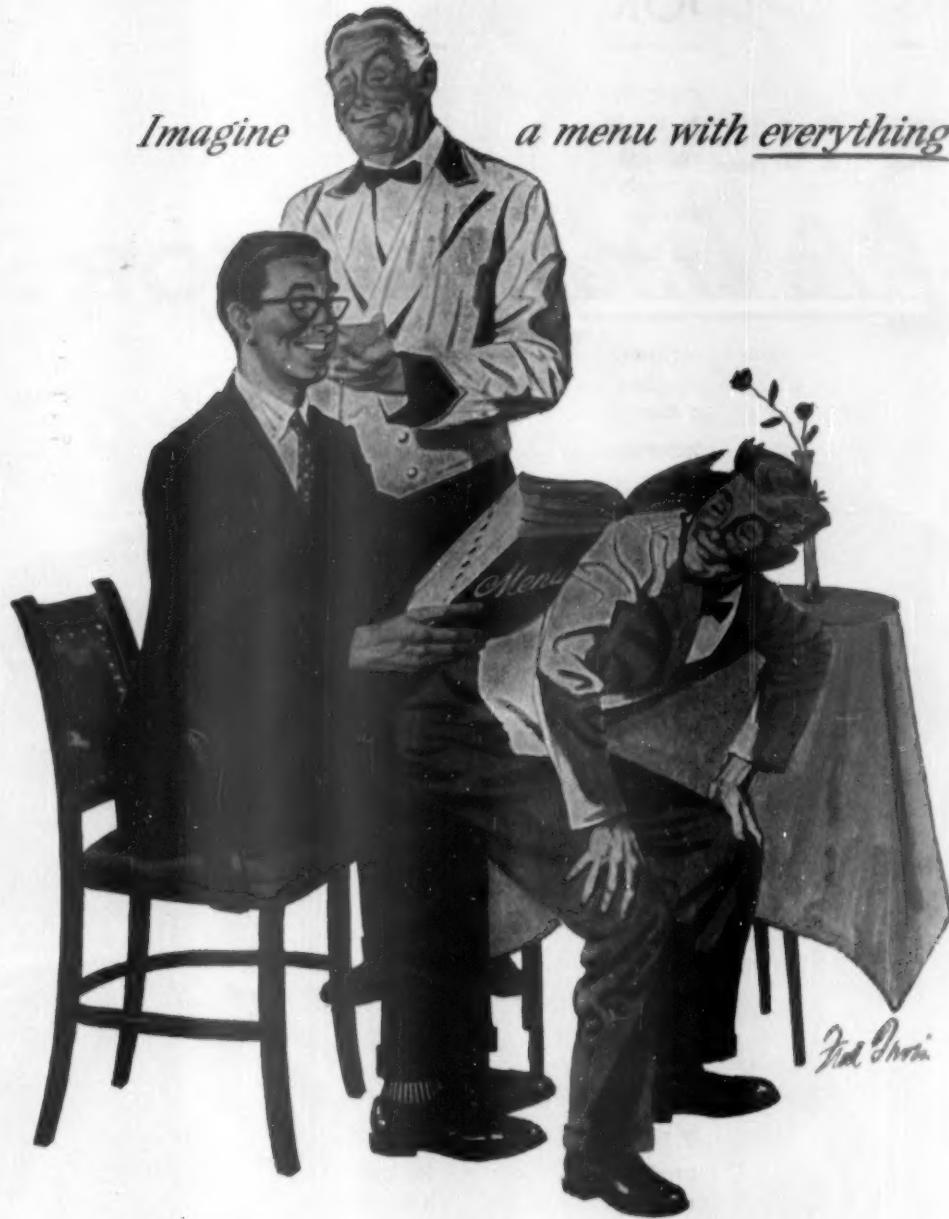
Consumption of natural rubber was a little over 47,000 tons in January, virtually unchanged from a year earlier. Use of synthetic, on the other hand, dropped to 50,000 tons from more than 70,000 last year.

A year ago, natural rubber brought several cents a pound more than synthetic. Now, selling around 20¢ a lb., it's under synthetic.

About coffee: Last year's 5.1-billion-lb. world crop was less than the 5.4-billion harvested 20 years ago—in the face of increased consumption. And the U.S. Dept. of Agriculture, noting that the bean still is grown in the same old way, suggests production improvements seem in order.

*Imagine*

*a menu with everything on it*



There's something deeply satisfying in the thought of a place that could serve anything you wanted, no matter how widely your fancy led. We ruefully concede that a restaurant could never operate that way . . . but we do—at least so far as stainless steel is concerned.

No matter what stainless grade you need, what shape, form or finish—we produce it in Allegheny Metal. Sheets, strip or plates; bars, wire or special shapes; tubing, castings or

forgings: whatever you require, we make it. And you get one uniformly high standard of quality, one undivided responsibility.

We have another value to offer you, too . . . the many-sided experience of over thirty years' pioneering with stainless steel. It's at your command—ready anytime to help you secure the competitive edge that Allegheny Metal can give you. *Allegheny Ludlum Steel Corporation, Oliver Bldg., Pittsburgh 22, Pa.*

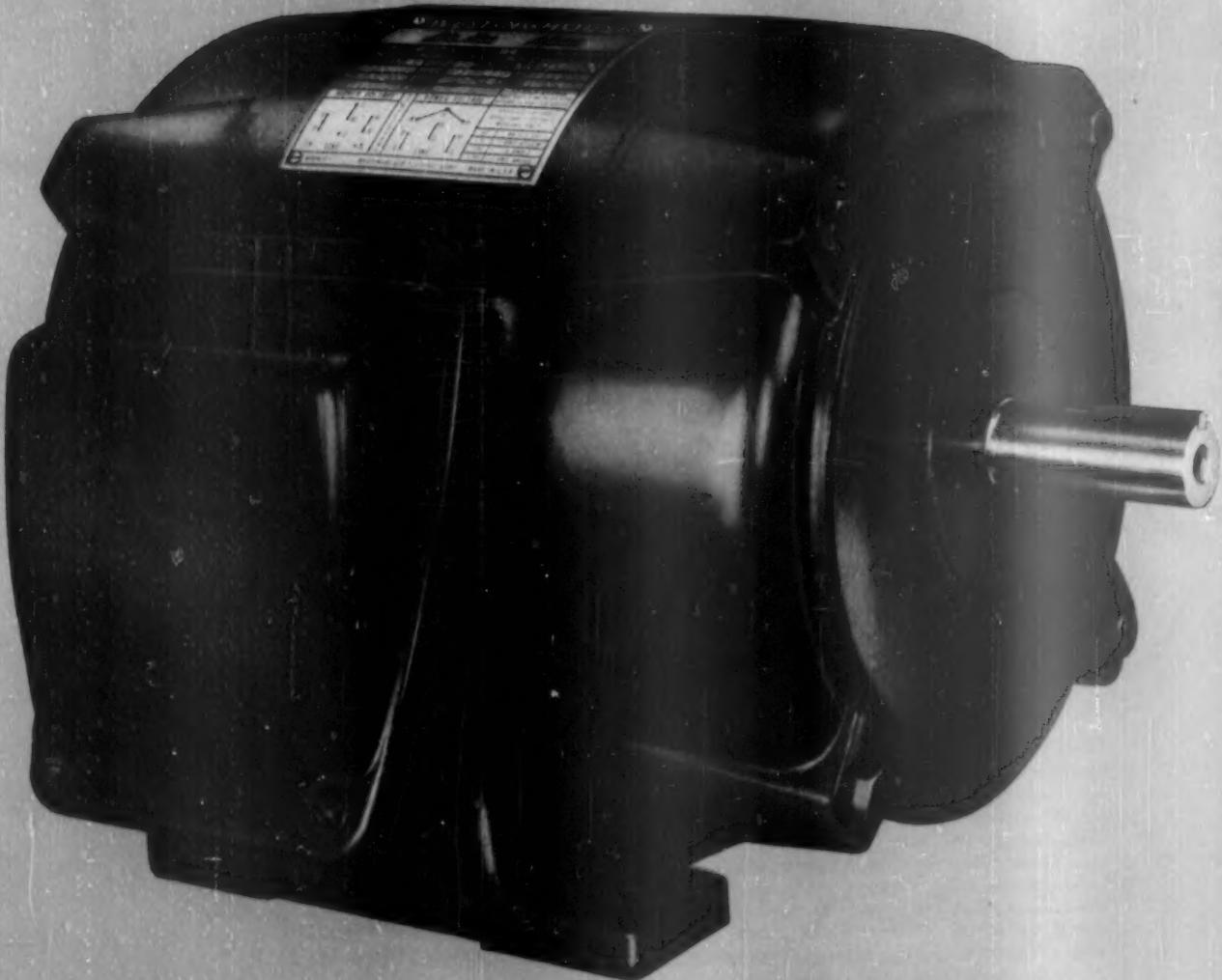
WED 5012

You can make it BETTER with  
**Allegheny Metal**

Warehouse stocks carried by all Ryerson plants



THE NEW  
*Life-Line A.* MOTOR . . .



# the big step ahead by Westinghouse

Here it is... the new Life-Line® "A" motor. A new motor that reflects the continuing engineering and manufacturing leadership of Westinghouse.

The new Life-Line "A" motor is still a step ahead of the industry. How? Through balanced design and proved performance. Look at the improved materials and advanced mechanical and electrical components—each one matched to its neighbor.

New? Yes, but not untried. The new Life-Line "A" does not discard the past... instead, it profits by it, builds upon it. Each component of the "A" motor has been screened in the laboratory, then proved on production-line motors. You're not buying "theoretical" performance. The new Life-Line "A" motor is a proved Life-Line.

**THIS FREE BOOK** contains all the details on the new Life-Line "A" motor. Write for Booklet B-6154. Westinghouse Electric Corporation, 3 Gateway Center, P. O. Box 868, Pittsburgh 30, Pennsylvania.

J-21890



YOU CAN BE **SURE**...IF IT'S  
**Westinghouse**



**NO GREASING  
REQUIRED**



**New FORTIFIED INSULATION** means longer motor life. MYLAR® slot insulation has greater strength. BONDAR coil insulation has more heat resistance. BONDITE impregnating varnish withstands attacks from destructive elements.



**New DRIPPROOF PROTECTION** means greater application flexibility. Frame is completely enclosed so that it remains dripproof in all positions. End bracket openings are located in the under quadrant for maximum protection.

**New 4-WAY SEAL**, pre-lubricated bearing means lower maintenance costs. A bearing with two protective seals on each side. This bearing has all the advantages of the original Life-Line bearing—plus extra protection.

\*DuPont trade-mark for polyester film



**THE ENDLESS VARIETY** of new uses for aluminum foil has created a rapidly growing demand.

To meet this increasing demand we are producing for converters foil of unsurpassed quality in a wider range of specifications than ever before.

This is only part of our vast expansion. Before year's end we will have the capacity to produce close to 30% of all the primary aluminum made in this country. This will be two and one-half times as much as the whole industry produced prior to World War II.

We are proud to serve American industry by providing the production capacity that has helped end the shortage of aluminum in this country.

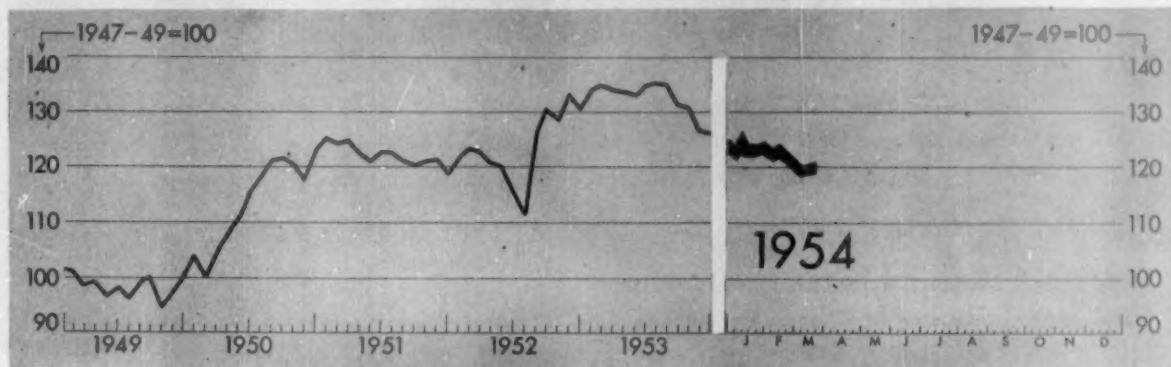
And we shall continue to be dedicated to the service of American industry—not only by providing an abundance of the highest quality aluminum in all its many forms, *but also by working with manufacturers* to help turn aluminum's unlimited opportunities into realities.

In this way, we believe we can help bring about a brighter future for all America—with better products at lower cost.

**Kaiser Aluminum**

America's fastest growing major producer of aluminum

# FIGURES OF THE WEEK



## Business Week Index (above) . . . . .

\$ Latest Week	Preceding Week	Month Ago	Year Ago	1946 Average
*120.9	†120.6	123.0	133.9	91.6

### PRODUCTION

Steel ingot production (thousands of tons) . . . . .	1,585	†1,613	1,756	2,324	1,281
Production of automobiles and trucks . . . . .	154,405	†143,478	148,257	169,923	62,880
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands) . . . . .	\$39,693	\$37,283	\$33,330	\$50,002	\$17,083
Electric power output (millions of kilowatt-hours) . . . . .	8,572	8,519	8,551	8,078	4,238
Crude oil and condensate production (daily av., thousands of bbls) . . . . .	6,461	6,458	6,315	6,489	4,751
Bituminous coal production (daily average, thousands of tons) . . . . .	1,157	†1,043	1,266	1,430	1,745
Paperboard Production (tons) . . . . .	245,325	243,388	232,388	247,375	167,269

### TRADE

Carloadings: manufactures, misc., and l.c.l. (daily av., thousands of cars) . . . . .	66	65	66	76	82
Carloadings: raw materials (daily av., thousands of cars) . . . . .	35	33	38	41	53
Department store sales (change from same week of preceding year) . . . . .	-8%	-11%	-1%	+11%	+30%
Business failures (Dun and Bradstreet, number) . . . . .	243	229	215	160	22

### PRICES

Spot commodities, daily index (Moody's Dec. 31, 1931 = 100) . . . . .	431.6	428.6	424.6	419.2	311.9
Industrial raw materials, daily index (U. S. BLS, 1947-49 = 100) . . . . .	83.7	82.8	81.0	91.8	††73.2
Foodstuffs, daily index (U. S. BLS, 1947-49 = 100) . . . . .	100.8	99.7	98.3	88.1	††75.4
Print cloth (spot and nearby, yd.) . . . . .	20.2¢	20.1¢	19.5¢	21.0¢	17.5¢
Finished steel, index (U. S. BLS, 1947-49 = 100) . . . . .	140.9	140.9	140.9	130.7	††76.4
Scrap steel composite (Iron Age, ton) . . . . .	\$24.17	\$23.33	\$24.33	\$44.25	\$20.27
Copper (electrolytic, Connecticut Valley, E&MJ, lb.) . . . . .	29.980¢	29.980¢	29.969¢	29.720¢	14.045¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.) . . . . .	\$2.41	\$2.42	\$2.38	\$2.41	\$1.97
Cotton, daily price (middling, ten designated markets, lb.) . . . . .	34.28¢	34.28¢	34.18¢	32.97¢	30.56¢
Wool tops (Boston, lb.) . . . . .	\$2.12	\$2.12	\$2.12	\$2.10	\$1.51

### FINANCE

90 stocks, price index (Standard & Poor's) . . . . .	212.4	211.4	205.6	207.6	135.7
Medium grade corporate bond yield (Baa issues, Moody's) . . . . .	3.48%	3.51%	3.59%	3.57%	3.05%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate) . . . . .	2%	2%	2%	2%	1%-1%

### BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks . . . . .	54,897	54,753	54,143	54,479	††45,820
Total loans and investments, reporting member banks . . . . .	80,765	79,700	79,872	78,010	††72,036
Commercial and agricultural loans, reporting member banks . . . . .	22,939	†22,481	22,555	23,418	††9,299
U. S. gov't guaranteed obligations held, reporting member banks . . . . .	32,848	32,292	32,346	31,014	††49,879
Total federal reserve credit outstanding . . . . .	25,704	25,638	25,897	26,178	23,883

### MONTHLY FIGURES OF THE WEEK

	Latest Month	Preceding Month	Year Ago	1946 Average
Cost of Living (U. S. BLS, 1947-49=100) . . . . .	February . . . . .	115.0	115.2	113.4
Exports (in millions) . . . . .	January . . . . .	\$1,090	\$1,349	\$1,293
Imports (in millions) . . . . .	January . . . . .	\$837	\$908	\$922

\*Preliminary, week ended March 20, 1954.

†† Estimates.

■ Date for "Latest Week" on each series on request.

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TOLL ROADS: THERE'LL BE A LOT MORE. Who's doing what where to build a network. .... p. 94

# FINISHING



**FINISH THAT WON'T FOLD UP** under the toughest service conditions—Du Pont DULUX Enamel—is being sprayed on folding chairs by automatic electrostatic spray at the rate of 7 chairs a minute.



**TOUGH DULUX** Tractor Enamel takes hard knocks on the job . . . withstands years of outdoor exposure.



**SPECIAL DULUX** Tank White Enamel for oil industry reflects heat . . . reduces evaporation losses.



**DURABLE**, sparkling DuPont DULUX appliance finish has sparked the sales of more than 36 million refrigerators.

## Folding chair finish that sits pretty for years

No piece of metal furniture takes more punishment than a folding chair. They're stacked one on another when not in use . . . take constant abuse when in use. To protect them, paint must have unusual resistance to chipping and hard knocks, as well as smart good looks. That's why one of America's

foremost metal chair and table manufacturers has turned to DuPont DULUX. DULUX provides a handsome gloss that helps build sales . . . keeps its sparkle through the years to keep a customer's good will.

And durable DULUX is adaptable to many different application techniques.

There are more than 12,000 DuPont finish formulas already serving industry. If you have a finishing problem, you can get expert help by contacting the DuPont sales technician in your area. Or, write E. I. duPont de Nemours & Co. (Inc.), Finishes Division, Wilmington, Delaware.

## DuPont Industrial Finishes

Chemically engineered to do the job better.

DUCO AND DULUX ARE REG. U. S. PAT. OFF.



REG. U. S. PAT. OFF.  
BETTER THINGS FOR BETTER LIVING  
... THROUGH CHEMISTRY



Emile Montemurro, Midwest Manager of Fox Movietone News, tells how:

## He handles 300 reel problems a day!

"Old news is no news," says veteran newsreel cameraman Emile Montemurro.

"We've been getting the news to theaters and TV stations all over the U. S. — news that's hot and fresh — by using Air Express. We've relied on them for over 25 years.

"Air Express handles some 300 shipments a day for us. They go all over the country, coast to coast. With new TV

stations opening and using our newsreels, that figure will soon reach 600 a day!

"Other air services would cost us more than Air Express, we've found. Besides, you cannot duplicate the excellent personal attention Air Express gives every shipment."

It pays to express yourself clearly. Say Air Express! Division of Railway Express Agency.



# Air Express

GETS THERE FIRST via U.S. Scheduled Airlines



IT'S HERE. In Memphis, and all over, winter-weary millions are turning into tree and flower addicts. The economic question is . . .

## Can Spring Turn the Tide?

For almost two months now, the country has been waiting for the calendar to turn. Spring, 1954, has become a symbol, not just a season. Around it, the U.S. has stacked its hopes for a turn for the better—an end to the winter-long recession chill.

Last week, to a background of lingering respiratory noises, spring arrived.

• **Into Bloom**—In Guilford County, N.C., farmers were seeding clover and Lespedeza for hay, and the bulls were back with the herd. Los Angeles hotels drained their year-round swimming pools for an acid bath and a fresh coat

of paint. Jonquils and Johnny-jump-ups were out in Memphis, and in New York's Central Park two dogwoods mustered their courage and bloomed. A dust storm settled over Denver, and in Orono, Maine, it snowed. The Giants beat the Indians 9 to 1.

In Philadelphia, blue-skinned young men with flat stomachs rowed their sculls into the wind on the Schuylkill River. Little boys in Chicago busied themselves with muddying their mothers' floors. Around Chardon, Ohio, the maple trees sprouted buckets as sugaring-off began. Walla Walla

(Wash.) farmers seeded peas. In Custer, N.J., the ice cream truck reappeared and was mentally stoned by parents.

Buffalo began a cleanup drive. In Cincinnati, robins, trading on their welcome, stamped about the lawns in search of breakfast. Three girls in Portland, Ore., got new Italian haircuts. Bock beer came back. And across the breadth of suburbia the scene was littered with seed catalogs, paint color cards, and samples of fertilizer, organic and inorganic.

• **Can Spring Do It?**—This was the



EASTER BUNNIES line up in the window of Memphis' Moselley-Robinson drugstore, get the onceover from a discerning customer . . .

## A Surge of Springtime Activity Sweeps

look of the U.S. this week as it put on its flowered bonnet and dressed for its blind date with spring. By reputation, it knew something of what to expect from that date. From habit, it knew how to primp itself to prepare for it. But behind this the fact remained that it knew precious little about the individual charms—or faults—of this particular spring. And it was itching to know.

Washington itself has singled out spring, 1954, and given it special stature. The Eisenhower Administration has said that March business results will provide the key to whether more drastic federal antirecession moves are in order. Seldom have so many eyes been trained on the basic economic indicators. Seldom have so many businessmen asked: Can spring do it?

• **Seasonal Surge**—When spring beckons, essayist Ambrose Bierce said, "All things to the call respond; the trees are leaving, and cashiers abscond."

Whether or not cashiers are stuffing their pockets, Bierce was substantially

correct in saying all things respond to spring. Quite apart from the silliness it provokes and the seasonal rise in petticoat fever, spring's warm drafts have a positive effect on most of the U.S. economy. Production normally perks up its head in February and responds with a further rise in March. Employment puts its foot on the next stair and poises for its climb to June. Builders begin to build, auto assemblers assemble. Business sales jump.

This is spring's normal pattern—the one the Administration had in mind when it set apart March as the critical month. But the true test of spring this year is not whether it behaves normally, producing some upsurge from the levels of January and February. The test is whether the surge will be enough to matter—enough to signal the end to the eight-month-long business slide.

• **No Signal Yet**—This week **BUSINESS WEEK**, with a spring flower in its buttonhole, asked its reporters to sniff the air in their parts of the country. Could they detect any real balm of spring?

If not, when did they think it would come to their town? Where did they think it would come from?

Their answers were contrary—as contrary as the month of March. Some, notably in Detroit and the Pacific Northwest, felt that spring had already begun to warm the hands of their economy. Others—and there were more of these—saw no pickup yet, sensed only wistful hopes among the pussy willows. Still others lacked even the pussy willows to talk about.

Much of this, of course, is the fault of March itself. With its customary nastiness, it welcomed spring with a backhand; rain, snow, and wind swept over most of the country as winter made its formal departure. Further, March this year has been a careless month. Easter has slipped out of its grasp and with it has gone one of business' trustier stimulants for early spring. Even its history has failed to cooperate. March this year, no matter how it makes out, must be judged against March 1953.



NURSERIES come alive. Landscape-happy hordes are back and . . .



MEMPHIS PRIMPS with spruce-up drive as . . .

## Over the Country—and Business

And in business sales, that was the greatest March on record.

With all this, it is still too early to draw conclusions about spring and what it will bring to U. S. business. The only solid fact at the moment is that a positive turnaround signal is still to come. Though there is more cheer in autos this week, the faces in steel are longer with another slip in the operating rate. Over-all, the status remains quo, and the promise of an upturn is still unfulfilled.

• **Construction Signs**—Yet spring has always brought some lift to business. And that should be true this year, even though there is no telling how potent the transfusion will be. Where should this lift show? What are the areas to watch?

Construction is probably the most notorious of all seasonal industries, although its reputation today is only partly deserved. Building has less of a spring bounce in it than it used to. Off-site construction and greater use of ready-mix concrete have shifted more

work into winter schedules and with that has come some shaving of the warm-weather peak. Just the same, spring still means building—particularly in the residential field.

Construction so far this year has been behaving nicely. Value of all work put in place in January was 3% ahead of a year ago, and in February it managed to keep a 1% margin. Housing starts have been going the other way, though, trailing behind year-ago figures for eight consecutive months. For spring-watchers, starts are the area to keep check on.

• **Farms Stir**—Spring, as always, reigns supreme on the farm. As soon as the ground is workable, the farmer is out with seed. In much of the Midwest, the timing is usually late March. First come the grasses and small grain crops, like oats. Then in May, it's corn planting—the biggest chore of all. Soybeans follow that.

All this period is one of capital outlay for the farmer. On the income side, spring is the poorest period of the

year. This is the time when he goes to the banks, and when his borrowing, at least partly, shows up in the new farm equipment in his yard.

Last year, for the first time since the start of World War II, farm equipment buying returned—in dead earnest—to a seasonal pattern. One estimate is that 65% to 70% of all sales are now concentrated in spring and fall, with spring holding the edge. Production in the industry has already shown some upturn from the winter's low, but sales are the real key. Spring's sprouts, if any, will show up there.

• **Ore Movement**—When ice breaks up on the Great Lakes, ships are supposed to move. When it melts off the roadways, cars are supposed to move. And that in turn implies that people have cars—preferably new ones—and the gasoline to fill the tanks with.

Last year was an all-time record breaker on the Great Lakes. More than 95-million gross tons of iron ore moved from the mines to the mouths of steeldom's furnaces. With the first break in



**BACK TO THE FIELDS** plowed up for cotton (that's the 35,000-acre Delta and Pixeland Plantation, biggest in the world, left) goes a Scott (Miss.) youngster. All over the mid-South, it's the season for planting cotton, soybean, and pasture land.



**BACK ON THE ROAD** from Memphis, goes the company of Bisbee's Comedians, one of the five last "meller-drama" groups left in existence. They'll hit the smaller towns in the area. Tomorrow night's performance: East Lynn.

## But a Spring Turnaround Signal for

the ice, the ships were off, despite the premium insurance rates they had to pay for March movement.

This year there's nothing like that. With the steel rate down to 66.5% of capacity this week and with few orders in sight to warm its hearths, the bulk of the ships probably won't start their first trip until after Apr. 15 (when regular insurance rates take hold). Mountains of ore are standing in mill-yards and at dockside. On May 1, there will still be an estimated 21-million tons of last year's iron ore waiting for consumption. And at the present rate, that's enough for three months' diet.

If there is any substantial movement of ships before mid-April, that would be a promising sign.

• **Auto Picture**—The over-all pattern of auto sales is a rise in March, continuing to a May-June peak. Until this week, autos could hardly be described as spurring to meet spring demand.

For months now, Detroit's avowed faith in the new-car market has seemed

like part natural optimism, and part a deliberate attempt to whistle past a graveyard. As far as the automotive industry is concerned, there never was a good winter nor a bad spring. In the face of economic indicators turning downward, the automotive men all along have insisted they are going to sell a lot of cars in 1954, and that, come spring, sales would leap skywards as they always have done in the past.

The tradition has held up. New-car sales began to liven up early in March.

For the moment, at least, there seems an end to back-and-forth manipulation of production schedules, the cutbacks set up by big manufacturers as insurance against overoptimism as they cautiously felt their way into spring.

Plymouth has gone to a second shift. Chevrolet is working five days a week, and last week put its Janesville (Wis.) assembly plant on a six-day basis. Ford operated six plants on a six-day basis last week, and went to a nine-hour day at others.

Production of 1,416,000 cars in the first quarter promises to be the third best in the industry's history, topped only by 1951 and 1953. All in all, there's a cheery atmosphere in Detroit auto circles these days. Things look normal to auto sales executives. The proof of this, though, will be in reliable sales figures—the registration data that trail a month or so behind. A protracted spell of damp, chilly spring weather in big auto markets such as Detroit, Chicago, or Los Angeles could still throw a pall over the industry, and auto leaders, while breathing easier, don't feel they're out of the woods yet.

• **Gas Picture**—In gasoline, it's just like autos. A rise in consumption normally sets in in March, though the peak comes a little later—in August.

Stocks at the moment are 18.7-million bbl. over a year ago. Despite this, petroleum forecasters are figuring on a rise of about 3% in demand for the year as a whole. There's more driving done in winter today than was the case,



CONSTRUCTION moves into high gear. A \$6.5-million, 13-story addition rises at the Baptist Hospital in Memphis . . .

## the Businessman Is Still to Come

say, 15 years ago. But the spring pickup still remains formidable. Its effect on stocks will be the thing to watch—assuming production holds firm.

• **Retail Sales Clue**—If there is one area where spring truly puts its mettle to test it is retail sales. Through January and February, the department and specialty stores have one date circled on their calendars—Easter.

This year, it's a late date—and a number of retailers feel that's a good omen. They're hoping warmer weather will thaw the Easter shoppers. Moreover, they stand to benefit from the reduction of excise taxes that takes effect Apr. 1.

A real spurt will be the more welcome this year because over-all retail sales in February were down 3% from a year ago. You can trace most of that drop to hardgoods. Appliances have taken a beating, with big-ticket items bearing the brunt. About the only appliances to buck the tide were washers and driers.

There's been some spottiness in soft-goods, too. Women's apparel has been disappointing—though the men were out buying in force in February.

You can single out the lines that will be calling the turn on 1954, from a normal spring retailing pattern that shapes up this way:

You can expect some lines to slide with the first crocuses. The shopper's interest in electric blankets, space heaters, TV receivers, driers, and sewing machines has a way of palling come spring. Driers and ironers normally move fastest in the fall. In fact, the average appliance dealer reaps the bulk of his housewares sales in the fall—especially December.

But a flock of lines typically start blooming in the spring, many to reach full flower a month or two later. Here are some to watch.

One key line is clothing. Women's apparel and accessories feel a surge in March and April. Almost everybody starts buying shoes in March, April, and

May. Menswear and boyswear perk up and keep climbing through June.

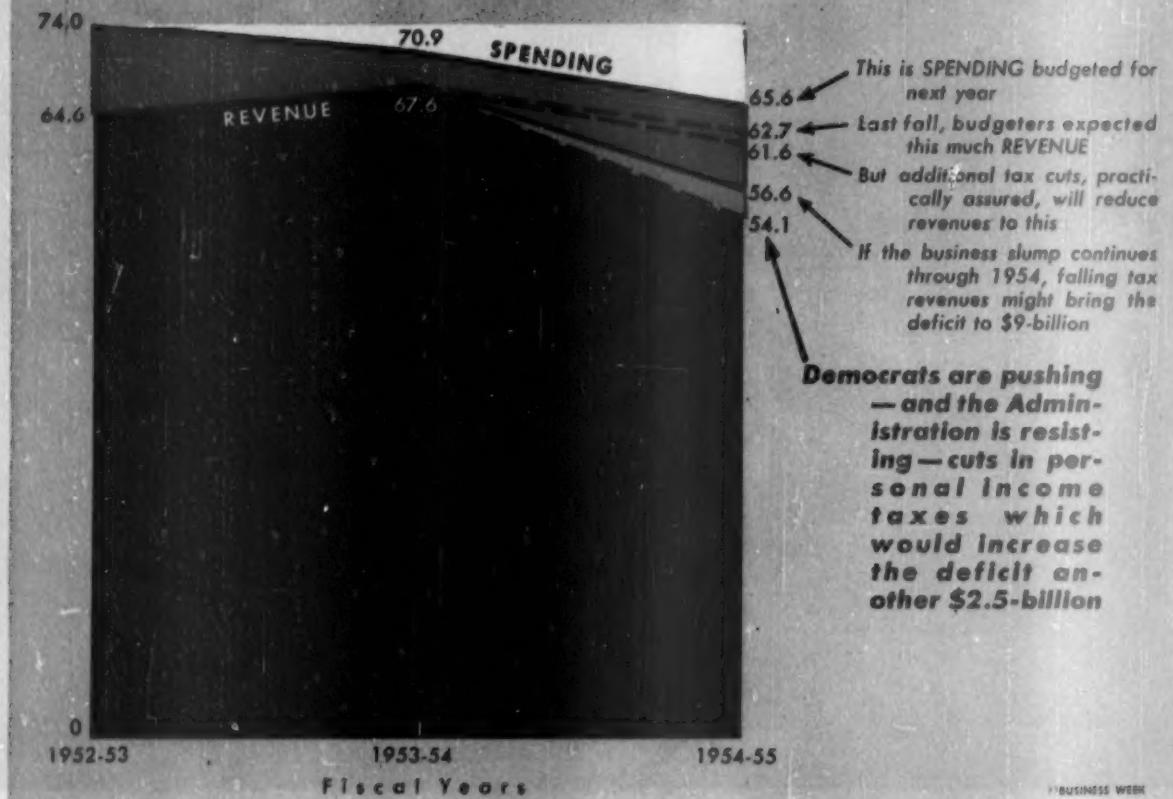
Housewares normally show a pickup from March to May. That goes, too, for furniture and home furnishings such as linoleum, draperies, curtains, and awnings. By May, furniture sales are usually strong, with outdoor furniture heading the pack. This year, fast-moving do-it-yourself items are already providing a shot in the arm.

You get the same sort of action—with a somewhat later peak—in some of the appliances. Refrigerators do best in May, June, and July. Freezers follow a similar pattern, hitting a crest in June. Washers do best in May. June is top month for fans and air-conditioning units.

Spring works its wonders in the food field, too. Grocery sales normally climb through February and March, reach a peak in April. Moreover, the customers start crowding into the eating and drinking spots—though the bars and tables get most jammed in July.

## Next Year's Deficit—and how it's growing

(Fiscal Year 1954-55)  
Billions of Dollars



## The Budget Still Calls the Tune

The figures on which the chart above is based are painful to the Eisenhower Administration. They show a budget that is moving away from balance—not toward it, as was hopefully forecast two months ago.

There's no doubt that if the budget were approaching balance, the Administration would quickly agree to further tax reductions as a way to halt the business downturn.

But in the face of persistently discouraging business news the Administration still keeps a balanced budget as the keystone of its economic policy. The chart makes it plain that the chief architect and defender of that policy—Treasury Secretary George M. Humphrey—is in no position to relax.

In January, when the budget for fiscal 1955 was sent to Congress, Humphrey foresaw a deficit of \$2.9-billion.

Tax changes now well on their way through Congress have reduced revenues and thereby increased the potential deficit to \$4-billion. That may not be

all. Even heavier blows will fall if the business downturn continues and if Congress gets out of hand—spending more and cutting taxes more as Election Day approaches.

• **Looking Black**—This picture is a dark one for Humphrey. But it has not changed his overriding conviction that what the country needs more than anything is a balanced budget.

He believes that as firmly as he did in January 1953 when he took office near the peak of the boom. March has come—and almost gone—with every sign that the Administration is going to stick by budget balancing as its chief economic policy, at least until summer.

### I. The March Story

Humphrey has ridden out the immediate threat to his budget-first policy posed by the President's designation of March as the key month. The President said that what happened in March might show whether the Administration

should adopt an active, and possibly expensive, antirecession policy. He said it casually in a press conference Feb. 17. Immediately, Sen. Walter George and other Democrats seized it as the rallying point for their fight to reduce personal income taxes as a means of stimulating business.

For a while it looked as though Republicans would join the tax-cut banner in sufficient force to put over a proposal by House Democrats that income tax exemptions be raised \$100. It took a TV appeal by Eisenhower to the people, plus some bare-knuckled White House pressure, to hold the line. The vote last week was narrow: 210 against, 204 for. Only 10 Republicans actually jumped the fence to vote for it.

Democrats will renew the fight. But they don't plan to push it to a showdown in the Senate until May—possibly late in the month.

• **No Crash**—In the meantime, Humphrey slid past March without the crashing downturn that would have

scattered his strength in Congress beyond repair.

When the figures begin to come in next month, they will show pretty much what everybody knows anyway: that March was a cheerless month, marked chiefly by steel's disappointing failure to increase production. It also brought announcement of reductions in business plans to invest, and in consumer plans to buy (BW-Mar.20'54,p25). Unemployment rose again. But Administration spokesmen argue that business merely continued the slow settling of the preceding seven months, and showed no signs of a cumulative plunge into a depression.

This brings them some cheer, though it has also forced some of them to change their minds about what will happen the rest of the year. The more cheerful had hoped that March would show real buoyancy—the beginning of a climb back to higher production. Now they suspect spring will show a less-than-seasonal increase (page 27) and may even see some more declines.

• **New Deadline**—This line of thinking postpones the hope of recovery into summer. It points up May as the new month of decision.

## II. Policy-in-Being

Ever since the President's late-January Economic Message to Congress, there has been a lot of talk about taking massive action against a recession—if the need arises. The President's press conference comment about March was made against the backdrop of this report, with its promise to use the government's "vast powers to help maintain employment and purchasing power," and its warning that "even a minor readjustment may be converted into a spiraling contraction."

This sort of action is what many people thought Eisenhower had in mind if March did not show at least a seasonal upturn. Actually, the Administration had no plan for massive action when the President made his comment (BW-Feb.27'54,p25). It has none now. There is no sign that it will have one in May, though much can happen in the meantime.

• **Philosophy**—The key "vast powers" theme in the economic report was repeated this week by Commerce Secretary Weeks in a speech in Toronto. But it remains a broad philosophy, and not a program ready to be put into operation at the touch of a button.

This means that the effective, working policy of the Administration is the one for which Humphrey is the chief spokesman. It consists of two parts. First, balance the budget. Second, stimulate business by revising the tax laws, as is done in the bill passed by the House.

What Humphrey is telling congressional committees and the President is simply this: The "vast powers" concept may be all right in its place, but its place is not now, with business moving down at a slow and measured pace and with the budget far from balanced. He put a bright face on the economic situation this week before the Senate Appropriations Committee. He said unemployment—put at 3,671,000 in February—was "relatively low." He was not alarmed at the prospect of slack business until late spring. But he thought a cut in personal income taxes such as proposed by Sen. George would be "disastrous."

• **Dug In**—A look back shows how firmly this policy is entrenched. It came into office with the Administration.

Clearly, the present policy would be changed if business plunged down, instead of inching down. Eisenhower has promised that it would, over and over. Also, it would be changed if the inching went on long enough.

• **The Gamble**—If the downturn works itself out by summer, Humphrey may go into fiscal 1955 with the budget only slightly out of balance and with everything pointing to a new round of business expansion. That's what he's counting on. If he loses this gamble, his budget, as the chart shows, will receive a critical blow anyway, just from declining revenues. He will then have to decide whether the time has come to put the "vast powers" into operation, or whether he will fight on in a last-ditch defense of his cherished goal.

## Counterfeit Brake Parts Haled into Courts

A "whodunit" plot was brought to light this week by Bendix-Westinghouse Automotive Air Brake Co. A factory or factories unknown have been counterfeiting Bendix-Westinghouse brake chamber diaphragms, complete down to the B-W name, trademark, serial number, and in some cases mold number, and selling the phonies to B-W replacement customers.

In addition to the loss of business, amount still undetermined, B-W worries about this: The authentic brake chamber diaphragm—a rubber disk shaped like a pie tin and used only on trucks or buses—is built to function for at least 1-million applications of a brake. None of the counterfeits tested by Bendix-Westinghouse stood up to more than 27,000 applications, and some failed after 6,000 times.

The municipally owned bus system in Chicago has been using the counterfeits under the impression they were genuine; so has an unnamed bus company in Los Angeles.

B-W last week started suit in four federal courts to restrain five distributors from sale of the phonies. Early failure of some of the counterfeits on Chicago buses had tipped off the hoax. The bus company complained to B-W, which found, among other things, that the diaphragms were made of reclaimed rubber. B-W's diaphragms are all made of new rubber.



## This Way, the Avalanche Is Shot

The U.S. Forestry Service has called out the artillery to lessen the dangers of snow slides. It seems that a few well-placed shells can get the snow bank sliding while it's just a pup. That

prevents deadly and unexpected slides later, and permits the plows to clear roads on their own time. At left, 105-mm. guns blast away, after sighting (right) at Stevens Pass, Wash.

## Natural Gas Law

It will give regulatory power over pipeline distribution systems to state utility commissions.

Federal Power Commission is trimming its jurisdiction over natural gas distribution systems operating within a single state.

Legislation scheduled to be signed either this week or next by President Eisenhower would put the regulatory power over these natural gas pipelines entirely in the hands of state utility commissions.

Sponsored by the National Assn. of Railroad & Utility Commissioners, the new law is designed to untangle some of the overlapping regulation of state and federal bodies. Proponents say it will actually lower rates, since natural gas distributors won't be saddled with all the accounting and legal work that is now required because of duplicate regulation.

Once assured that there would be no gap between state and federal regulation, FPC gave its backing to the bill, which adds a limiting amendment to Section I of the Natural Gas Act.

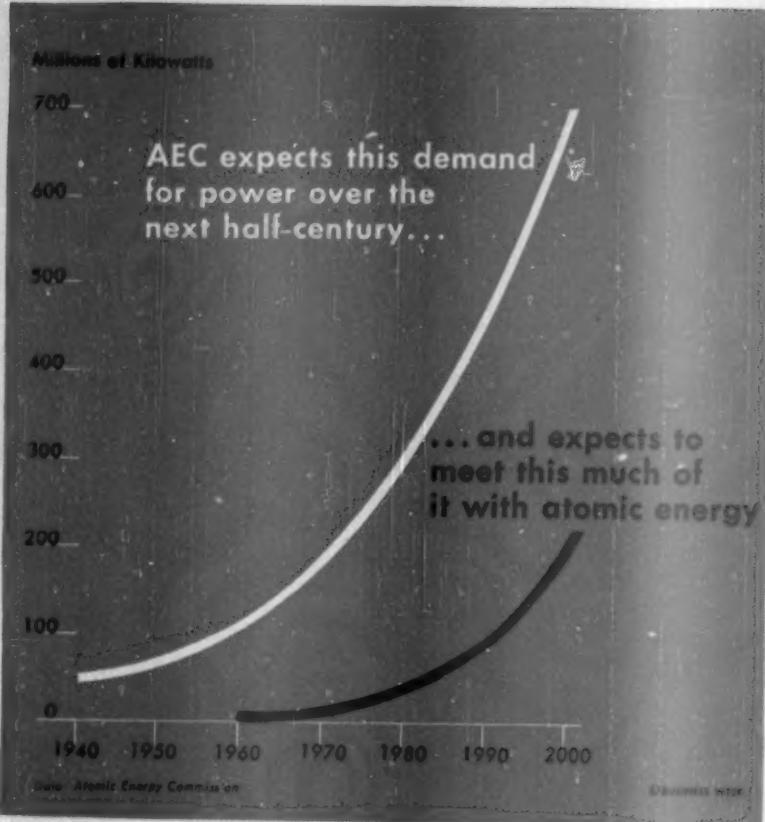
Up to now, intrastate distribution systems have been subject to federal regulation if they ran stub lines from their main systems to connect with interstate lines. Based on the "flow of commerce" doctrine, FPC has freely asserted jurisdiction over such systems with the approval of the courts.

- **Test Case**—Case in point is East Ohio Natural Gas Co., which sells natural gas at retail in a large portion of Ohio. It ran a line to the state boundary to tap on to an interstate line. FPC moved in and ordered East Ohio to set up an accounting system in line with federal regulations, submit operation and financial reports for years previous, and obtain certificates for stub lines.

The company figures it would cost around \$14-million to comply with FPC orders, and took the case to the Supreme Court. The court backed FPC's ruling that East Ohio was a natural gas company under federal law, and subject to federal regulation.

Congress moved in last year to change the law to exempt East Ohio and others in the same situation, but the Senate didn't get around to passing the bill until this month.

- **Up to the State**—To make sure that intrastate distributors are subject to rate and other regulation, state utility commissions will have to certify in each case that they are exercising these powers.



## Mapping an Atom Market

Now that its first commercial atomic power project is practically signed and sealed with Duquesne Light Co. of Pittsburgh (BW-Mar.20 '54,p31), Atomic Energy Commission officials are looking further ahead. This week they made public a preliminary study of future power sources (chart).

For the first time, AEC's industrial reactor branch has set up specific targets of power capacity and cost. The agency counts on its five-year program of reactor development (BW-Mar.13 '54,p32) to start the ball rolling. By 1960, AEC hopes, nuclear power will be supplying electricity in the competitive industrial field.

- **Capacity**—Between 1960 and 1970, the study shows, nuclear power plants will account for 10% to 20% of electric capacity put in place. As production costs go down, nuclear plants will take an increasing share of the power generation market. Atomic fuel will compete most with coal, oil, gas, and least with hydro power.

In the year 2000, about 29% of total installed capacity is likely to be nuclear-fueled, and 50% of new generating capacity put in place in that year will use nuclear fuel.

- **Production Costs**—AEC is shooting at a nuclear power cost of 8 mills by

1960. This would enable atomic-fueled electricity to compete with the highest-cost 10% of modern steam-electric plants.

By 2,000, AEC hopes to trim the cost down to around 6 mills, which would put nuclear-electric power on even terms with 50% of modern generating plants that use conventional fuels.

If AEC can bring its cost as low as 4.9 mills, atomic-fueled electric plants could compete with all but the most efficient and most modern 20% among conventional plants.

AEC's calculations assume that production costs of conventional plants will stay about as they are now, that any gain in their technical efficiency will be more than offset by rising cost of fuel itself.

- **New Market**—AEC further expects that the new atomic plants between 1960 and 1985 will create a market for \$11-billion worth of equipment: \$3-billion each for reactor components and cooling systems and about \$5-billion for turbines and related conventional equipment.

Of course, this isn't clear gain for the equipment industry—some of it will come out of orders for conventional power projects.

# Do You Use Steel?

## Here's a check list for evaluating suppliers

Steel has been in such short supply for so many years that there has been a tendency toward lower standards. With the situation now reversed, it may be well to raise our sights and give the production or fabricating departments a break.

With this in mind the following check list may be worth consideration.

### First, on the character and capacity of the supplier:

- Is the supplier a good dependable company with a wide range of steels actually in stock so I can take full advantage of quantity differentials and save time in ordering and other office details?
- Am I establishing a business relationship with a company which will be able and willing to supply me with steel at fair prices next month or next year—even if demand should again exceed supply?
- Can I return the material if it has not been processed and I find that I can't use it?
- Can I count on the supplier to settle any reasonable difference of opinion to my satisfaction? Is the supplier customer-minded?
- Does the supplier have, not only the interest, but also the ability to carry my account in times of national stress or a possible financial difficulty?

### Second, concerning the material:

- Is the steel of known, uniform quality so that I know what can be expected of it and can be sure of getting steel of the same uniform quality next month or next year?
- Is the steel accurate as to size or gauge so that no time is lost in extra processing? Is scrap minimized or eliminated?
- Is the steel in good condition? Has it been carefully stored, handled and shipped so that it will arrive ready for use?

### Third, concerning the service:

- Can I depend on clean accurate cutting so that the steel will be immediately available for use without further cutting or preparation?
- Can I be sure of correct weight?
- Will the steel be delivered when promised so I will get it when I need it, even on very short notice?

No source is perfect, and we certainly do not pose as such. However, we have been serving industry—with good sound steel from stock at fair prices for over one hundred years. And we have been working with our customers in many other ways from helping with finances to solving problems of fabrication and inventory control.

We stand ready to serve you well whenever you call.

JOSEPH T. RYERSON & SON, Inc.

CARBON, ALLOY AND STAINLESS STEELS IN STOCK FOR IMMEDIATE SHIPMENT

STEEL SERVICE PLANTS AT: NEW YORK • BOSTON • PHILADELPHIA • CHARLOTTE, N. C. • CINCINNATI • DETROIT • BUFFALO  
CLEVELAND • PITTSBURGH • CHICAGO • MILWAUKEE • ST. LOUIS • LOS ANGELES • SAN FRANCISCO • SPOKANE • SEATTLE

## BUSINESS BRIEFS

Therefore, it is our opinion that FIVE HUNDRED TWENTY-THREE THOUSAND, EIGHT HUNDRED FIFTY-SIX DOLLARS AND SEVENTY-ONE CENTS (\$523,856.71) represents the sound value of the property appraised as of January 2, 1954 for continued use as a part of a going concern.

Respectfully submitted,  
THE AMERICAN APPRAISAL COMPANY

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is only as good as  
the EVIDENCE behind it!*

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Montreal and Toronto

AD-X2 on the griddle again: The Federal Trade Commission has leveled charges of false and misleading advertising against Jess Ritchie (page 8) and his controversial battery additive. Hearings are to start May 10. AD-X2 had been in the headlines since Dr. Allen Astin, head of the Bureau of Standards, lost—and regained—his job after labeling the product "worthless" (BW—Apr. 11'52,p34).

Upsy-downsy seems to be the recipe for freight rates. Eastern railroads, driving to regain steel business from the truckers (BW—Mar. 20'54,p102), have secured ICC permission to cut their iron and steel rates an average of 15% until the end of next year. But truckers in the rich East-Central area announce that a 10% boost in rates for "class" goods will be extended in a month to iron, steel, and other commodities.

Thompson Products, Inc., of Cleveland, plans to move into the TV camera field with the purchase of Dage Electronics Corp., of Beach Grove, Ind., tentatively scheduled for Mar. 31. Thompson Products now makes parts for aircraft, autos, and electronic equipment.

Flying on the cuff is the latest project of Pan American World Airways. Pan-Am's credit plan will go into effect May 1, will cover hotel and other expenses as well as actual flight tickets. The terms: 10% down, with payments running up to 20 months.

Scrap steel futures may be added to the trading on the Chicago Mercantile Exchange, which now includes eggs, butter, onions, potatoes, and turkeys. Governors of the exchange will consider the plan at their April meeting, if current studies have been completed. Idea of the trading would be to break the wide fluctuations in scrap prices; but many trade sources are skeptical.

Big Four packers have agreed to the dropping, "without prejudice," of federal antitrust charges (BW—Mar. 20'54, p34). Thus the case is closed for now, though the government can reopen it.

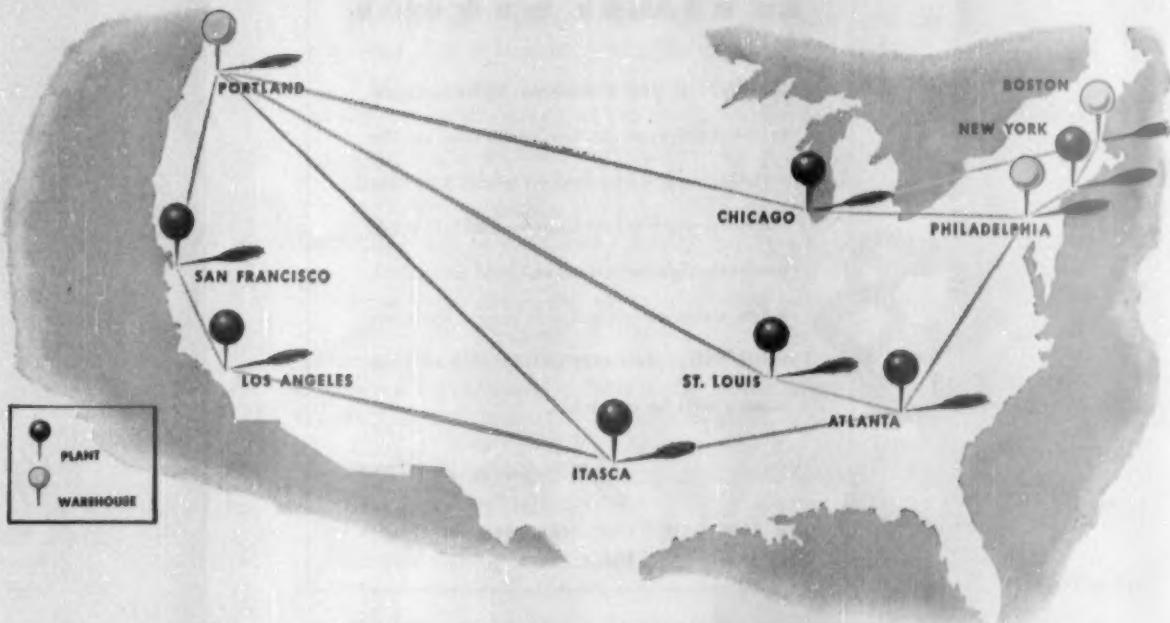
The woman's touch on the New York Central's board of directors is the latest idea of financier Robert R. Young. Young has added Mrs. Lila Acheson Wallace to the slate of directors with which he hopes to unseat present management (BW—Mar. 6'54,p26). Mrs. Wallace and her husband own and edit the Reader's Digest.

# Somewhere in your business...

in the making, the labeling, the packaging or the shipping of your product—  
you use adhesives...We operate on the belief that for each particular  
application, there is only one adhesives formula that can serve you best.

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there is an Arabol plant or warehouse ready to serve you.



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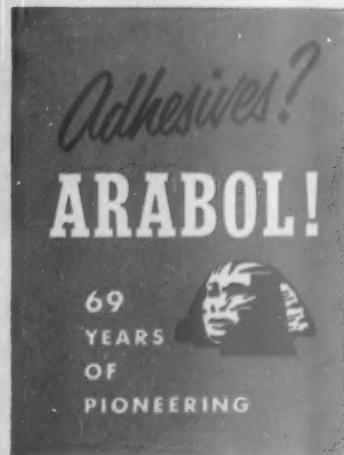
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# WASHINGTON OUTLOOK

WASHINGTON  
BUREAU  
MAR. 27, 1954



Eisenhower will sweat out the slide for a while longer before acting on his commitment to prime the pump more—when and if necessary.

March figures on business won't set policy. Eisenhower did talk about March as something of a test month. Despite the headlines at the time, he didn't get very far out on any limb (BW—Feb. 27 '54, p37).

May will tell the story. If the slide flattens out, Eisenhower will stay with present policy. But if the trend is still down you will see shifts—on tax, budget-balancing, and deficit stands.

Political implications of the "new hard times" are easy to understand when you take a look at where the slide has hit hardest.

Unemployment is concentrated in close political states—states where the Democrats are strong in the big cities, the GOP is strong with farmers.

Take a look at these eight states—New York, New Jersey, and Pennsylvania in the East; Ohio, Indiana, Michigan, Illinois, and Wisconsin in the Midwest. The GOP has 120 members of Congress from these states; the Democrats, 54. Hot contests for both House and Senate are involved.

Farm votes add to the worry over labor votes in these states. Usually, the Democrats run ahead in the big cities; the GOP runs ahead with the farmers. Farming is important in all of these states. Dairying (and truck crops) is a big business in New York, New Jersey, Pennsylvania, and Wisconsin. General farming, livestock and grain, is big in the other four states. The thing that worries Republicans who are up for reelection in the House and Senate is that they may lose while Eisenhower is making up his mind on farm legislation.

There's pulling and hauling at the White House on business. Advisers to Eisenhower are divided on what policy to adopt.

Businessmen on the team urge caution. Treasury Secretary George Humphrey favors standing pat until the picture is clearer. He's typical of those on one side of the argument. Humphrey thinks it's too early to give in.

Professional economists have a little different slant. Their worry is that what started out to be an inventory correction is now snowballing. Consumers are pulling in, waiting for the slide to push prices down more. A lot of economists want government stimulants used before slowness becomes general. They think it's easier to avoid a recession than to reverse it.

About \$1-billion in excise tax cuts will go through. Eisenhower opposes on budget grounds. But Congress would upset a veto.

Odds are against further cuts in individual income taxes barring a reversal by Eisenhower. The House was whipped into agreement. If the Senate should get out of hand, the conference committee will support the White House. Democrats say privately they have lost their big battle for higher personal exemptions. But they aren't unhappy. They feel the Administration has been put on a political spot—business against the workers.

Incentives for business in the tax revision bill will be voted—sure. Eisenhower considers this No. 1 in his program—has told his leaders so.

You can count on faster depreciation of new facilities. Eisenhower is really pushing this tax reform.

# WASHINGTON OUTLOOK (Continued)

WASHINGTON  
BUREAU  
MAR. 27, 1954

**Lower taxes on dividend income still are a good bet, but not so sure.** The importance of a steady flow of capital to business is well recognized by politicians in the House and Senate. But there's a wide reluctance to give dollars of investment income any preference over wage dollars.

—•—  
**Don't get upset by talk of a \$10-billion deficit.** It's still just something that could happen (page 32).

**Eisenhower's budget will be upset—the budget for the fiscal year 1955, the year starting July 1.** Revisions in sight are two-sided.

**Congress will cut receipts.** The excise bill will lop off some \$1-billion from estimated government income.

**But spending may be cut, too.** In January, Eisenhower estimated that he would spend \$65.5-billion in fiscal 1955, collect \$62.6-billion, and run a deficit of nearly \$3-billion. Now Congress may cut outlays by some \$2.2-billion. This would more than offset the excise tax cut.

—•—  
**Note the handling of Taft-Hartley act changes.** Committees of the House and Senate are moving in opposite directions.

**The White House has more control in the Senate.** The committee these days is sticking pretty close to Eisenhower's proposals for revisions.

**The House committee is out of hand, however.** The majority sentiment favors tightening the law as applied to unions, not relaxing it.

**Prospects still are for no change in the law this year.** The unions, bitter critics of the statute as it stands, can't get revisions they want. So they will oppose everything. That can block changes.

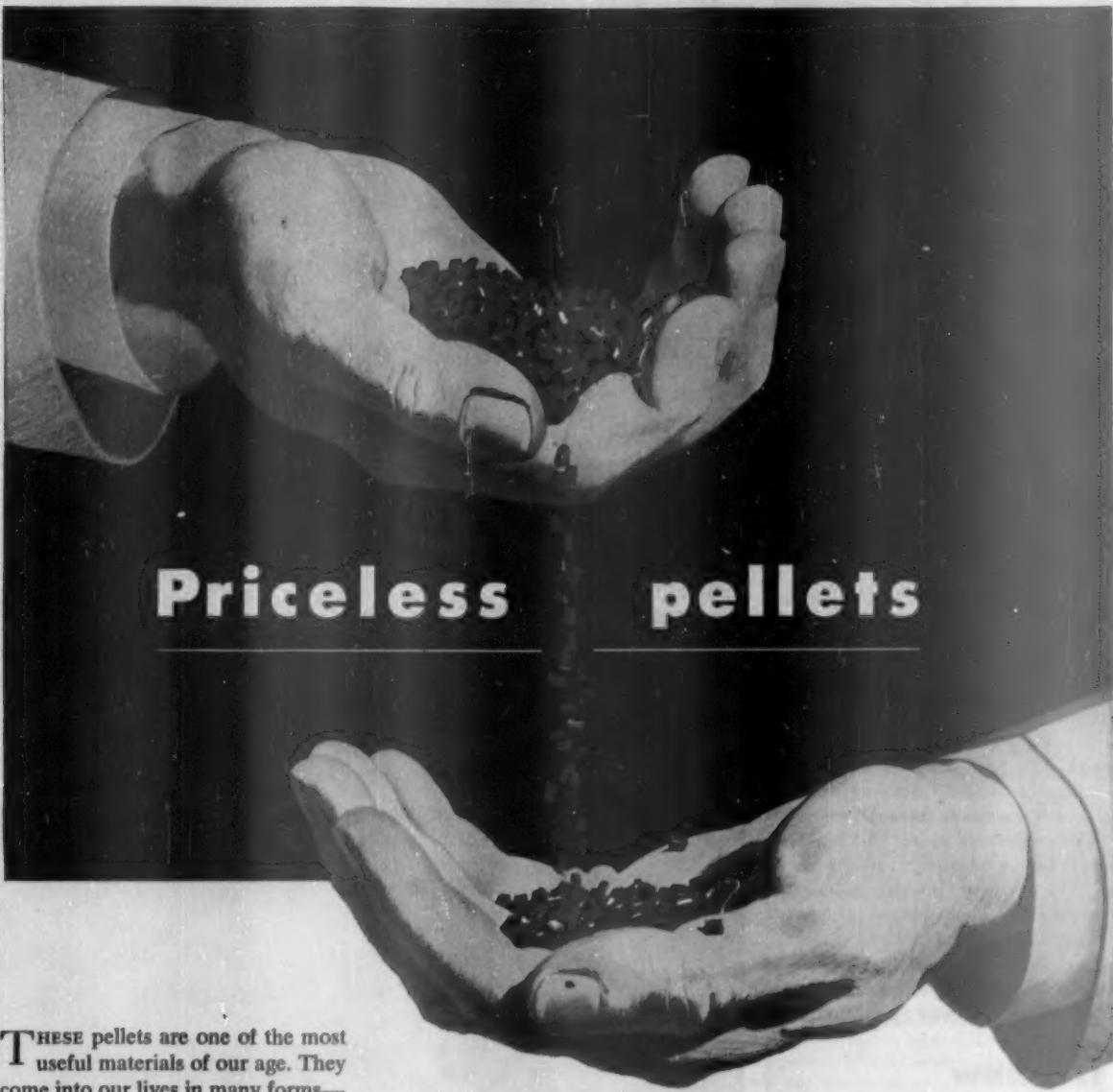
**Administration of Taft-Hartley is being changed without any action by Congress.** The National Labor Relations Board is revising interpretations.

**Management's hand is being strengthened, generally.** Objective of the Eisenhower men on the board is not to favor management over labor, but to correct some of the pro-labor bent of the old Democratic board.

**Examples:** Union men who participate in "hit-and-run" strikes are no longer protected by the labor law (page 152). They can be fired. New jurisdictional rules will be out shortly. Lots of "local" businesses will be put outside the law on grounds they are not important to interstate commerce. The board feels they belong under state rather than federal law. Unions are bitter over this.

—•—  
**Keep an eye on the weather for the next six weeks.** A drought is due—overdue, in fact. The old dust bowl is blowing again. The grain surpluses of today could look a lot smaller by fall. The U.S. Weather Bureau is cautious when it comes to looking ahead. But spokesmen, unofficially, draw a comparison with the '30s. Drought would change the farm price outlook and the political outlook, too.

—•—  
**Indo-China is at a critical stage.** More and more we are being drawn into the war there—help in the air, help at the technical level. If the French do hold now, we may be off the hook. But if they should fail, then our choice is to intervene—or let the French suffer a shattering defeat that might force them to accept a truce with the Communists.



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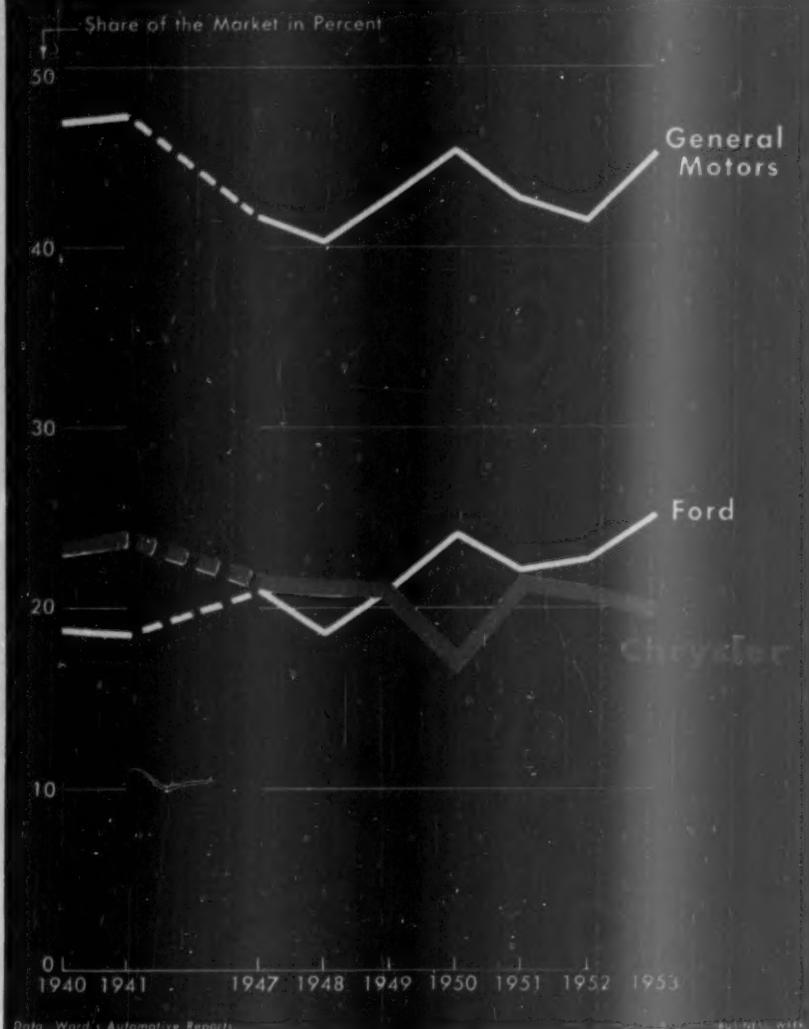
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# MANAGEMENT



SHARE OF MARKET held by Chrysler has dropped. Now its president . . .

## Chrysler Thinks Its

Any way you look at it, either by 1954 new-car registrations or by current production rates, this year's figures out of Detroit don't improve the chart above in Chrysler's favor. What became obvious last year has become as inescapable as a neon sign today: Marketwise, Chrysler Corp. has slipped.

It's natural, then, that wherever you go—Detroit, last week's Chicago Auto Show, New York—you hear the same double-barreled question: What's wrong with Chrysler, and what's going to be done about it?

• **No Baby**—There are no glib answers to either half of the question, for it

deals with a big and intricate subject:

- A corporation that turns over \$3.3-billion of sales a year in an industry almost notorious for its competition. Chrysler moved from eighth to sixth largest company in the U.S. in sales volume last year.

- A company that last year broke its own sales record in both dollars and units. It sold 1.2-million cars, against 956,000 the year before.

- A company to which Prudential Insurance Co. of America has been willing to commit \$250-million as a 100-year loan—without any liens, mortgages, or dividend and policy restrictions.



. . . L. L. COLBERT heads a group of younger executives who will tell you that . . .

## Troubles Can Be Solved

This giant company has its problems—as its president, L. L. (Tex) Colbert, would be the first to admit. But he's also quick to say that there's nothing "wrong" at Chrysler that he and his executives don't know about and aren't trying to fix.

### I. Competition

Competitively, the outstanding factor in Chrysler's life right now is its loss of market position.

This is more a symptom than a problem right now, but it could feed on itself until it becomes a problem.

Much of an auto company's sales are made up of repeat orders. When the company's market position is slipping, the decline is accelerated by the fact that there are ever fewer old customers to bank on for reorders. Eventually, the symptom reaches problem status.

Chrysler's loss of position hasn't yet gone far enough to be called a problem. Indeed, the loss may be only temporary.

But if the company's management doesn't stop the present trends, the results could be serious.

• **Strategy**—Above Chrysler are General Motors Corp. and Ford Motor Co.,

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IS LITTLE?

HOW Large  
IS BIG?

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both bent on outdoing each other. Beneath Chrysler are the independents, striving through mergers and new management to recapture their traditional 13% to 15% share of the market. At the moment, Ford's drive is hurting most.

In a sense, Chrysler now has the problem of shaping a new strategy. Executives at Highland Park (Mich.) headquarters say the entire competitive situation in Detroit is brand new. For the first time, two giants—GM and Ford—are openly battling one another.

Before World War II, Chrysler had only GM to worry about. General Motors had about half the total market, Chrysler one-fourth, and Ford and the independents the rest. General Motors seemed fairly well satisfied with what it had. Chrysler's management could gauge the bigger company's relatively calm tactics without too much trouble.

All that changed in 1946, when a near-revolution took place in Ford's management (BW—Oct. 17 '53, p130). Some new faces appeared, and with them a wave of new energy. Though the Korean war held Ford in check, it was apparent that the company had become a new factor in the market battle. And in 1950, with Chrysler crippled by a 100-day strike, Ford moved up to become the second biggest auto maker. It hasn't lost the position yet, and is trying seriously for the No. 1 spot.

Chrysler knows that if it wants to regain its 25% share of the market it will have to take on a new look.

## II. Management

Probably the key to Chrysler's success, if it comes, will be its reorganization as an operating company. Colbert calls what is going on today "intensification of divisionalization."

By that phrase, he means that organization changes began in 1950 when he became president, so what's going on is not new. But to the outsider, it looks like a much greater change than those words imply.

Undoubtedly Chrysler has no thought of remaking itself completely. It could not have grown to its present size with a management group that didn't know what it was doing. And, so far at least, it has shown little inclination to fill its management ranks with new people—as was the case with Ford. Nevertheless, the signs point to some significant changes in the company's organization and character.

• **Age Shift**—For one thing, younger men—including Colbert—have taken over key operating positions (BW—Sep. 15 '51, p68). They're old-timers in point of service, and now they're taking over the reins. This year, some got bigger titles to go with their importance. Two

**Over the Rockies  
to a growing  
Western Empire**



Pacific Ocean

A bright new era of industrial development is starting in the Pacific Northwest, now that the region has an assured supply of oil. Completion of the 718-mile Trans Mountain Oil Pipe Line is being implemented in British Columbia and Washington by the extensive construction of petroleum processing facilities.

Among the refineries which now or upon completion will have available Alberta crude oil from Trans Mountain or its U. S. lateral are:

- Imperial Oil Limited's new 25,000 barrels-per-day refinery at Ioco, British Columbia.
- General Petroleum Corporation, Socony-Vacuum's western affiliate, 35,000 barrels-per-day refinery at Ferndale.
- Shell Oil Company's 50,000 barrels-per-day refinery at Anacortes.

Bechtel has a key role in these programs—as designer, engineer and constructor of the refineries; and as owner's agent, engineer and manager of construction of the Trans Mountain Oil Pipe Line.

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division presidents, for instance—E. C. Quinn of Chrysler and W. C. Newberg of Dodge—will become directors at next month's annual meeting.

Chrysler's old hands are pretty much on the sidelines. K. T. Keller, board chairman, still has over-all authority. But the men beneath Colbert deal with Colbert. This year, more than at any time since he became president, Colbert is running the show.

- **Highland Park**—Colbert is Keller's personal choice as president. But the men who run the company's divisions are Colbert's. He has confidence in them; and because of that, he has been able to start cutting the division management loose from Highland Park.

Chrysler admits that, for a corporation as big as it is, it has been too centralized. But it also has a good excuse. Until the mid-1930s, Walter P. Chrysler was boss in every sense of the word. Even when he backed out of the picture before his death in 1940, his choice brought to the presidency another strong-minded leader—K. T. Keller. Like Chrysler, Keller was boss. With him were men like Fred M. Zeder, B. E. Hutchinson, A. vanderZee.

Today all these men are letting go of control. Just a couple of weeks ago, vanderZee decided to abandon the long-standing general sales conference in which all the divisions regularly got together—with vanderZee as head. And Hutchinson, financial man whose influence was felt throughout the company, has relinquished his vice-presidency.

Hutchinson is now chairman of the finance committee, but is looked upon more as a consultant than an active management man.

Colbert works closely with Keller, consulting with him but assuming full responsibility for what happens.

- **Benefit**—All this is obviously to the good for Chrysler. The men who now have responsibility are out to establish their reputations in big jobs. It will be natural for them to push harder.

Most important of all, they operate under a president who doesn't want decisions made at headquarters. Colbert looks on the change as a long-run project that will take constant attention. Decentralization in a company as big as Chrysler will be no overnight affair. "They'll keep wanting to crawl back under the tent," says Colbert.

That's true further down the line, too. Divisions within themselves are revamping personnel, reorganizing so that the sales manager, say, makes decisions he might have checked through the division head before, or even central headquarters.

In effect, Chrysler is doing what GM did 30 years ago; what Ford did in 1946. Chrysler figures it'll finish somewhere between the loose organization

SITUATION UNDER CONTROL

BY KEOKUK



CHIEF KEOKUK:

"Ugh! Heap smart little chief. I say, Rub sticks to start fire. Him rub MATCH sticks!"

PRINCESS WENATCHEE:

"Yes, Junior has everything under control!"

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of GM and the somewhat tighter-knit Ford system.

### III. Accounting

Until this year, none of Chrysler's auto divisions made a separate, internal financial statement. Only those like Airtemp, its air-conditioning division, handled their own accounting. Now the company is changing its accounting method—decentralizing it so that each division will handle its own finances. Heading the splitup are F. W. Misch, company controller; and George W. Troost, financial vice-president who had the biggest hand in engineering the \$250-million loan from the Pru.

Chrysler figures the new system will (1) let management spot cost problems more quickly, and (2) pin responsibility—along with authority—where it belongs.

• **Drawbacks**—Before this year, division management hadn't operated on a profit-and-loss basis. It was impossible, for instance, for the Plymouth division to estimate what its profit margins might be.

John P. Mansfield, president of Plymouth—which does about half of all Chrysler's business—says divisions used to operate on budgets. "But you'd make up your budgets and then have a charge slapped on you over which you had no control. Now, we'll get our stuff from the other divisions with a price tag on it which we can argue over."

• **Change**—In the old days, a division couldn't approve a \$5 raise for a clerk—even though Chrysler had salary ranges—without getting three signatures from headquarters.

Things are different now. The Dodge division, for instance, is ready to introduce a spring color line on hardtops and convertibles. Its controller and product planner and estimator—new jobs for the division—were able to work out something in a couple of weeks to match a similar move by GM's Oldsmobile. At headquarters, director of styling Virgil M. Exner saw it only after it was accomplished. Before, a division might have taken two months to do the same thing.

Chrysler is right in the middle of naming new controllers for each division, plus a full line of functional executives. The controller will have figures to report to headquarters on how much money his division is making—and how. There'll be far more places where profit is figured than at any other time.

Right now, the Indianapolis transmission plant is putting price tags on the transmissions the divisions buy—and it knows why it sets that price.

Management believes this tighter look at costs will help it improve one

important figure: the net earnings to sales ratio. It's been dropping to 2.23% in 1953 against GM's 6%.

### IV. Sales and Dealers

Next to management and accounting, Chrysler's sales and dealership setup comes close to being its thorniest problem. For one thing, it has a peculiar arrangement with Plymouth. This division has no dealerships of its own, but operates through all the other divisions—that is, Chrysler, Dodge, and De Soto.

This complicates things. For instance, in a community of 14,000 you'll have a Ford dealer, a Chevrolet dealer, and maybe two or three Chrysler Corp. dealers—each with Plymouths on his floor. Dealers complain that they compete not only with Ford and Chevrolet, but with the other Chrysler Corp. dealers on Plymouths.

One solution is to cut the number of dealers. Chrysler has no plans it will talk about to set up separate Plymouth dealerships. Even so, its Plymouth division is now in the process of building up its own field sales organization—the first it ever had.

• **Control**—Even more important, say Detroiters, Chrysler hasn't the control over its dealers GM and Ford have. It prides itself on its policy of "producing only to dealer orders." But while priding itself on that policy, it knows at the same time that this makes the selling problem tougher. Dealers, because they operate with an independent attitude, are likely to stand up against factory decisions—and be heard.

Last week, Chrysler announced what many people had been waiting for—a dealer financing plan. This also goes a long way toward answering the question: What's Chrysler going to do with the \$250-million it got from the Pru?

Under the plan, called Dealer Enterprise Plan, Chrysler Corp. will select dealers who meet rigid qualifications, and who will invest a specified minimum of the required capital. Chrysler will furnish the rest, to be paid off out of dealer earnings.

GM and Ford both have firmer control of their dealers, through long-established practice and financial tieups, than Chrysler has ever had. As a result, GM and Ford factories can go a lot further in getting greater sales effort out of the dealers when sales slump. With its gentler policy, Chrysler can't. Some observers believe that the new dealer financing plan may eventually change some of that.

• **Styling**—Chrysler is going after sales from another direction, too. Some of its top people will tell you that, in the past, the company has not put its line of cars across to the public as vigorously as GM and Ford. Chrysler

hopes to change that with more advertising and promotion, and a new emphasis on public relations.

The general public right now is not excited about Chrysler's body styling. The company hopes that some GM- and Ford-type promotion—plus Virgil Exner, Chrysler's first director of styling—will stir up more interest.

### V. Production

Chrysler is not generally thought of as a company fiercely interested in automation—as is, for instance, Ford. But Chrysler itself thinks it has efficient, up-to-date plants that can match any in the industry.

That will be more true when it finally digests Briggs Mfg. Co., auto parts maker that it bought last year. Chrysler is pouring a lot of money into the Briggs facilities. When modernization is complete, the integration of Briggs into Chrysler should solve a lot of problems.

For instance, Plymouth has always depended heavily on Briggs body production, right down to the scheduled minute—but, until now, Plymouth has had no direct control over Briggs. Now, problems can be solved quickly by executive action rather than buyer-customer bickering.

• **Location**—The presence of Briggs, however, won't cure another Chrysler headache—the fact that all but 10% to 15% of its cars are assembled in Detroit. This close-gathered assembly setup—unlike the scattering of GM and Ford plants—makes delivery to dealers far from Detroit far less flexible. It also puts Chrysler at a disadvantage in some areas when it pays freight rates to faraway points. After a drawn-out fight, Chrysler won from the Interstate Commerce Commission a small concession on the higher freight rates out of Detroit on assembled autos.

Chrysler has no plans for new assembly points outside Detroit, but it won't rule out the possibility.

Long-range production planning at Chrysler definitely calls for the manufacture of more of its own parts. Briggs was a piece of that move.

### VI. Labor Relations

In recent weeks, much to the surprise of almost everybody, Chrysler has settled on its contract with the United Auto Workers (CIO) covering the Briggs operation.

Chrysler's labor relations, ever since the 100-day strike in 1950, have not been noted for their amicability. And Briggs's labor relations have been a constant source of trouble for Chrysler. People foresaw more trouble when Chrysler bought the body maker. But apparently Chrysler was smart enough

to do some preliminary union dickering before it laid down the cash.

If that's true, it means Chrysler has developed a new point of view. It will take time to eliminate a deep-driven union distrust of Chrysler management (just last week Chrysler had to go to court to protect foremen, who have reverted to hourly status in the current cutback, from alleged union abuse), but Chrysler is sure that it will be possible.

## VII. The Outlook

What chances has Chrysler to make its 25%-of-the-market goal come true?

Chrysler thinks it might possibly do so this year. To understand that unlikely prospect, you've got to go back to the middle of 1953. Traditionally, the industry's production starts leveling off in the second half and drops sharply in the final quarter for model changes.

Chrysler figured on that, and so hit the market early with new 1954 models. But instead of cutting back 1953-model production, Ford stepped up output in its drive to beat Chevrolet—and the industry experienced its "blitz" sales of last fall, the first real ones since the war. The hullabaloo smothered Chrysler's new model promotion. And because of its policy with dealers, it had to cut back production sharply this year.

On the other hand, Ford and GM came out with their 1954 models later and are still producing at a fast clip. Many believe the production rates are above retail sales—hence the cries against wholesale "bootlegging" of 1954 models by dealers to used-car lots.

All that Chrysler can count on is that the pileup of Ford and GM cars will become so great the "blitz" this year will hit early. If that happens, GM and Ford may have to reduce production runs much more than Chrysler. It could put Chrysler in shape to regain its position this year. Or it may give it a stronger retail position—with dealers cleaned of Chrysler 1954 models—early in the next model year.

Because of these tactics on production, rumors have started about a mid-year Chrysler model change in 1954. Management flatly denies that and wants the rumors to die quickly for the sake of dealership relations.

• Ready—Actually, it's doubtful that 1954 will be Chrysler's year. One executive says it will be the worst year in the realignment of the company. All the reorganizing, refinancing, and production planning apparently are geared for 1955's battle.

Chrysler's management is geared for it, too. As George W. Troost said: "If there was ever any complacency at Chrysler—and I'm not saying there was—there sure isn't any now."



## We like **TOUGH** package problems

FOR EXAMPLE, one of our customers who realized the advertising possibilities of his shipping sacks, suggested a design in colors so brilliant as to seem, offhand, impossible of reproduction on tough kraft stock.

But we experimented with various inks and methods of application and came through with just what the customer wanted.

Could we ship on short notice?  
We could. *And did.*

Are your shipping sacks providing full value from the standpoint of impressive advertising? Call in the Raymond man for constructive suggestions. No obligation.

**THE RAYMOND BAG COMPANY**  
Middletown, Ohio  
Phone 2-5461

The logo for The Raymond Bag Company, featuring the word "Raymond" in a stylized, italicized font. The letter "R" is particularly prominent and slanted. A horizontal line or swoosh is positioned below the letter "m".

**MULTIWALL PAPER SHIPPING SACKS**

## Your Mailman Has Wings



### AIR Parcel Post

*flies with the Air Mail*

**AT YOUR SERVICE!** Air Parcel Post goes direct to the addressee's door—commands attention immediately upon arrival.

**ON WINGS!** Saves hours, days in shipping time—overnight delivery almost anywhere in the U.S.!

**HANDLED WITH CARE!** Air Parcel Post travels in the same pouches with Air Mail—gets the same preferred treatment.

**CUTS COSTS!** For packages up to 70 pounds, Air Parcel Post is in many instances the cheapest *quick* way.

**ADDED FEATURES!** You can send any package Special Delivery or Insured—Registered or C.O.D.

*For more information and rates call your Post Office.*

USA ...

### AIR Parcel Post and Air Mail



Advertisement by  
the Scheduled Airlines  
as a public service  
for the U.S. Post Office

## Woolen Gets Reweaving Plan

**Merger with Bachmann Uxbridge would give American Woolen a brand-new top management.**

After weeks of confusion, a rough outline finally emerged this week of what American Woolen Co., stumbling giant of the woolen and worsted industry (BW-Jan. 23 '54, p160), will look like if present plans go through.

At the annual meeting in Boston, stockholders got official word of a proposed merger with Bachmann Uxbridge Worsted Corp., Uxbridge, Mass., a leading manufacturer of woolens, worsteds, and wool-synthetic blends.

Last year Bachmann Uxbridge had sales of some \$52-million, on which it netted \$270,000 after taxes. American Woolen in 1953 had sales of \$73-million, but lost \$9.4-million.

- **New at the Top**—Sometime within the next few weeks, stockholders of American will be asked to approve the merger with Bachmann Uxbridge. If the plan carries, the merged corporation will be called American Woolen Co., but it will be a vastly different organization from the present company.

For one thing, it will have a brand-new management taken over from Bachmann Uxbridge. Harold J. Walter, president of that company, would become president and general manager of the merged firm. Other management personnel would also move over.

At present, Francis W. White is president of American Woolen. He has been the target of dissident stockholders, union spokesmen, and textile observers who have blamed some of his policies for American Woolen's difficulties.

- **Other Features**—Besides a new management, the merger will mean acquisition of the physical assets of Bachmann Uxbridge. These include 12 plants, four of them in the South. The company also operates a research unit at North Uxbridge, Mass., and its research on cloth and machinery is considered by many to put it among the more forward looking textile companies. There was also a hint that a third, unnamed company might be involved in the merger.

- **Chances**—There seemed this week to be few hitches in store for the plan—unless Textron, Inc., is able to carry out its threat to block the merger. Textron, run by Royal Little, has its own plan for merging with American Woolen. Joseph B. Ely, a director of American Woolen, says Bachmann Uxbridge's part in the merger is assured; those with whom American Woolen has been dealing, he says, control 70% of the Bachmann Uxbridge voting stock. Ely is a close associate of Fred-

eric C. Dumaine, Jr., president of the New York, New Haven & Hartford RR, who has become the leading factor in American Woolen's plans.

To effect the merger, American Woolen intends to ask stockholders to increase the authorized common stock. Bachmann Uxbridge would receive American Woolen stock in exchange for its physical assets; its cash would not go into the merged company.

- **Plants**—The merger plan, if approved, would supplant a proposal made early this year by the present American Woolen management to dispose of 11 plants, all in the North, and retire the company's 4% and 7% preferred.

The merged company would take a new look at the plant situation. Already American Woolen has received offers from some New England mill towns where its plants are shut down to finance new facilities.

Citizens of Pittsfield, Me., where the company has permanently shut its mill, have raised \$50,000 for a second mortgage to help build a new \$300,000 plant for lease to American Woolen.

### MANAGEMENT BRIEFS

**Steel-wool merger:** Stockholders of the H&B American Machine Co. and of Susquehanna Mills, both Maine corporations, voted early this week to merge. The former name will survive. Susquehanna, maker of woolens, reported a \$2-million deficit in 1953. H&B, which changed hands and sold its Rhode Island textile machinery business in 1952, now fabricates steel parts in recently acquired plants in Brooklyn, Indianapolis, and Chicago.

**Middle management compensation** is the subject of an annual report of the Executive Compensation Service of the American Management Assn., being mailed to subscribers this month. The new survey, which covers 1,900 positions in 100 companies representing 27 industries, is available from AMA on an annual subscription basis.

A racket busting conference, aimed at the solicitations rackets throughout the country, is being sponsored by the Cleveland Chamber of Commerce, in Cleveland, Apr. 22 and 23. Among those being invited are representatives from Chambers of Commerce, Community Funds, Better Business Bureaus, and foundations.

	KELSEY-HAYES		THE GENERAL TIRE			
	M.R.C. Strem SRB GURNEY BALL BEARINGS	In	MASSEY M-H HARRIS	Fruehauf TRAILERS "MADE IN U.S.A."	VICTOR "MADE IN U.S.A."	Plymouth
Willys	Willard	DODGE	Automotive	MOTOR WHEEL	FAIRCHILD Aircraft Division	STUDEBAKER CARS-TRUCKS
White MUSTANG POWER	B.F.GOODRICH	AMERICAN Brake Shoe COMPANY	CATERPILLAR	and	BOEING	CASE
Thompson Products	SPERRY	GOULD	US RUBBER	BUDA	Aircraft	Kaiser
the leaders rely on			ENGINEERING PRODUCTION	INTERNATIONAL HARVESTER	CURTISS WRIGHT	ALLIS-CHALMERS
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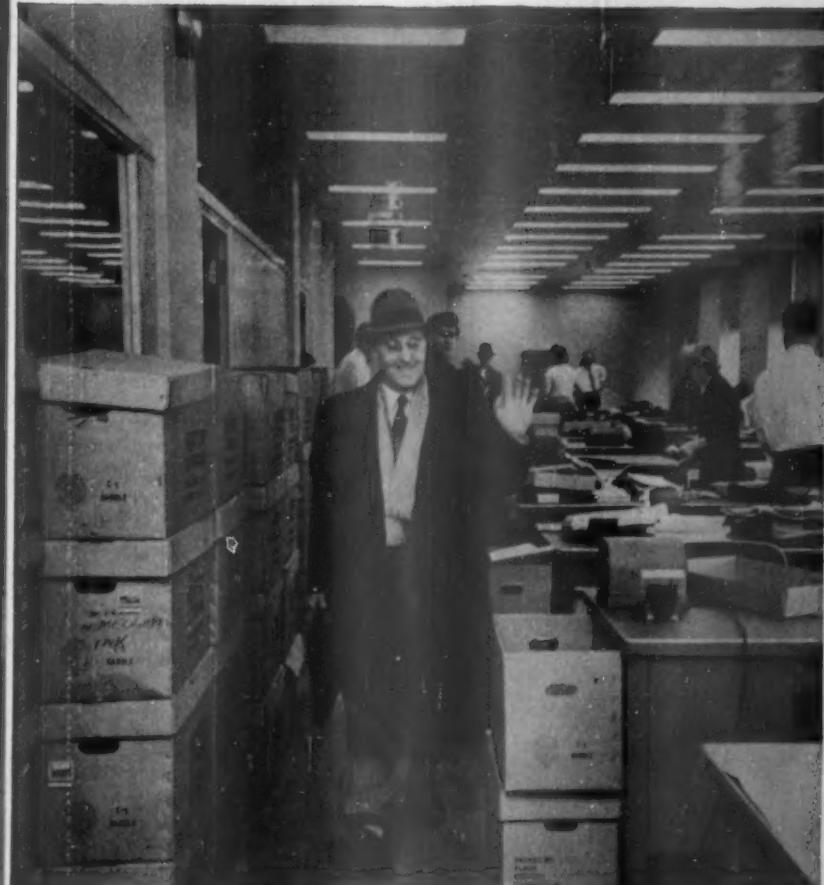
## Food

ROUND-THE-CLOCK moving is handled by Neptune Storage. The entire move—including 18,000 pieces of

furniture—was made in 600 truckloads, took three weekends to complete.



**A JOB WITH A VIEW:** That's what 1,200 white collar employees got when General Foods moved its general offices from Fifth Avenue to suburban White Plains, 25 miles away from midtown Manhattan.



**FIRST DAY** in the new quarters, moving and work go side by side. Like the office equipment, the workers were moved out

to White Plains in three installments. Many now commute in reverse, from Manhattan to Westchester.

## Company Flees Madding Crowd

This week, the nation's largest packaged-food producer packed its last desk, file cabinet, and employee and high-tailed it out of New York for a new home in White Plains, in suburban Westchester County. General Foods Corp., which has headquartered on Fifth Avenue for 30 years, made the

move (pictures) over three successive weekends with—to the naked eye, at least—scarcely a hitch.

Spectacular though it was, the significance of General Foods' emigration from midtown Manhattan doesn't lie in the mechanics of the moving operation. A company with an annual sales

volume of more than \$700-million should be able to pull off a stunt like that. What is important is the fact that a giant corporation decided to grab its hat out of the New York City ring.

• **Double Negative**—Why did General Foods desert the city? First, there are negative reasons. General Foods doesn't

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POST-WAR Design!**



Demand for this all-new Smith-Corona Office Typewriter is terrific. It really has all the rugged qualities of pre-war construction and materials—as well as the

many advantages achieved by post-war engineering, design and other improvements. Secretaries love this smart, new "Eighty-Eight"—for its many new and exclusive features—for its brand new tireless "touch," its speed and its fine "write." See and try it in your own office!

## See this Smith-Corona Carbon-Ribbon Typewriter

You'll be amazed at the Carbon-Ribbon "write" you will get. For very special correspondence and reports, for reproduction by offset, photolith, etc.—its print-like "write" is really handsome. Easy, quick interchange with fabric ribbon. Be sure you see this Smith-Corona Carbon-Ribbon Typewriter.



Call any Smith-Corona Full-line Dealer or Branch Office (See your Classified Telephone Directory)



Smith-Corona INC Syracuse 1 N Y Canadian factory and offices: Toronto, Ontario. Makers also of famous Smith-Corona Portable Typewriters, Adding Machines and Cash Registers, Vivid Duplicators, Ribbons and Carbons.

## The man from Cunningham & Walsh



... selling aspirin in Foster Village, N. J.

Here's a good way to cure headaches . . . the kind an agency man has when he makes advertisements without talking to the people who do the buying. The remedy . . . get out and sell to them from behind a counter. That's why Art Director Joe Messner went to work for a week at Horn's Pharmacy.

All our creative people work at least one week a year in groceries, department stores, wherever things are sold. Making sales to the consumers they meet personally helps them make many more to the millions they don't.

Cunningham & Walsh, Inc., 260 Madison Ave., New York 16, N. Y.

feel that a national company has to be headquartered in Manhattan. It points to General Motors, du Pont, and International Harvester as examples of corporations that do not feel the lack of a Manhattan address for their general offices. It also points to its competition. General Mills is in Minneapolis; Hershey is in central Pennsylvania; and Kellogg is in Battle Creek, Mich. A General Foods' executive says dryly: "They're not in New York, but somehow we still feel their competition."

Second—while it doesn't come out and say this—it's apparent that General Foods doesn't see any real necessity for its executives to be in the midtown swim-in New York, or in any other large city.

This is the most significant factor in the General Foods move. Manufacturing facilities, large and small, have been trickling into the suburbs for years. So have laboratories. But so far there has been no mass flight of companies that employ large forces of office workers—although there are notable exceptions (BW-Mar. 17 '51, p79).

- In the Minority—Not all types of businesses would agree with General Foods that executive elbow-rubbing in the heart of midtown isn't essential. Advertising agencies like to be near the media—broadcasting and telecasting stations, magazines, and big newspapers. Railroads establish their command posts near their big shops and terminals, shipping concerns near the big ports. Brokers must be close to the markets. Bankers want to be where the big accounts and the big borrowers are. In other words, a good deal of their business is a matter of personal contact.

But what about the general offices of a manufacturer? How many of its executives have to see people from other concerns in their daily course of business. What percentage of intracompany intercourse is actually handled by letter, telephone, and teletype?

In General Foods' case, the answer obviously was that the company simply wasn't dependent upon being at the very hub of business activity—but that it is still dependent upon being out on the rim. (General Electric is expected to follow General Foods to Westchester in five years or so.)

- Madding Crowd—Besides these negative reasons—which explain why the company doesn't have to be at the hub—there are positive reasons to explain why it doesn't want to be at the hub. General Foods first started thinking about moving out of Manhattan in 1937, only 16 years after it moved to New York from Battle Creek. The war stalled the plans, but by 1951, the company was ready to start talking realities to its employees.

Things were getting pretty crowded in Manhattan. The general offices were

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STEEL PLATES**

**STAINLESS-CLAD PLATES**

**FLANGED AND DISHED HEADS**

**MANHOLE FITTINGS AND COVERS**

**LARGE DIAMETER  
WELDED STEEL PIPE**



## *shipped the way you want it...*

**MAIN LINE RAIL SERVICE**

**'SEA OR INLAND WATERWAY**

**OVER-THE-ROAD TRUCK  
TRANSPORT**



***Delaware Valley, U.S.A.*** It's the home of Claymont Steel—America's fastest-growing industrial area and one that boasts unsurpassed transportation facilities for both shipper and buyer.

That's why the products of our open hearths, rolling mills, flanging shops and pipe mill can be shipped to you via transportation that

is most advantageous for you.

Let us know your requirements. Our location in the heart of the Delaware Valley means that we are most favorably situated to economically and efficiently serve your needs for steel and steel products. Get in touch with our nearest District Office or our General Sales Office in Wilmington, Delaware.

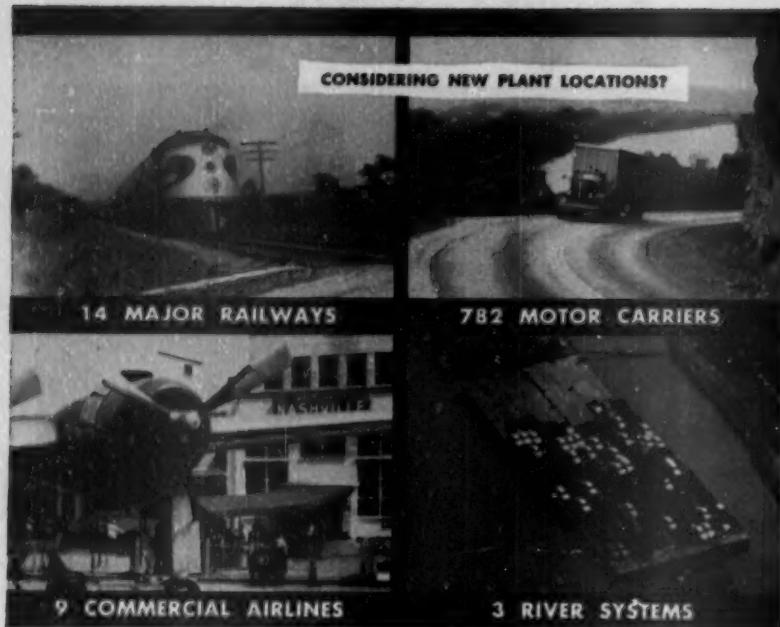
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PRODUCTS OF WICKWIRE SPENCER STEEL DIVISION • THE COLORADO FUEL AND IRON CORPORATION



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HOUSTON • LINCOLN • LOS ANGELES • NEW ORLEANS • NEW YORK • OAKLAND • ODESSA • OKLAHOMA CITY • PHILADELPHIA • PHOENIX • PORTLAND • PUEBLO  
SALT LAKE CITY • SAN FRANCISCO • SEATTLE • SPOKANE • TULSA • WICHITA • Canadian Representatives At EDMONTON • TORONTO • VANCOUVER • WINNIPEG



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If transportation looms large in your thinking — as it does with General Shoe Corporation, E. L. Bruce Company, Kingsport Press, the Wheland Company and other nationally-known Tennessee manufacturers — take a long look at Tennessee's transportation system.

Fourteen major railways link every section of the state with the markets of America. Seven hundred and eighty-two certificated motor carriers provide prompt service to large population centers in the North, East, South and Southwest. Nine commercial airlines make Tennessee one of the nation's air crossroads. Three navigable river channels — the Cumberland, the Tennessee, and the Mississippi — add an invaluable fourth dimension to Tennessee's transportation picture.

Yes, Tennessee has the transportation facilities you need — and one of Tennessee's 250 incorporated cities and towns can provide an ideal site for your new Tennessee plant. A letter outlining your operational needs will bring you a confidential plant location study.

*For complete information, write:*

GEORGE I. WHITLATCH, Executive Director



### TENNESSEE

INDUSTRIAL & AGRICULTURAL DEVELOPMENT COMMISSION

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• • • Tennessee's 4-way transportation system enables us to compete with any section of the country. Air, rail, highway, water—we use them all and find definite economies in having a full choice of transportation facilities."

GORDON P. STREET, President  
The Wheland Company, Chattanooga, Tennessee



scattered through three buildings, and conference, storage, and dining spaces were inadequate. Furthermore, General Foods estimated that the situation would get worse, not better. It considered moving to one of the cities where it has a plant; it thought about building in New York; then it weighed the various New York suburbs. White Plains got the nod.

White Plains is suburban, not too large (population in 1950 was 43,466), and not too far out. Company brass can get to midtown Manhattan in an hour or so. Travelers coming in from the west can hop off the train at Harmon, north of Manhattan, and be at the new building at about the same time their train gets to Grand Central.

• **Employee's Problem**—General Foods' employees still have a problem getting to work—but the problem has been altered considerably. Every morning, hundreds arrive at the new building by automobile from other suburban towns; a few are dropped off at the front door by their wives—who last week were dropping them off at the Scarsdale or the Mamaroneck station. Others come in by bus, some arrive on foot, and a relatively large group arrives on the train from New York City. This "reverse commute" has been made easier by the New York Central RR, which added an express train that leaves Grand Central for White Plains at 8:02 a.m.

General Foods hasn't yet surveyed its work force to determine exactly where everyone is now living—or where they plan to move to—but it's known there's a lot of moving going on. Since the White Plains plan was announced in 1951, about 170 employees have relocated, and, as of this month, another 150 are either in the process of moving or are considering it. Another 300 already live in Westchester, Connecticut, the upper Bronx, and other northern New York metropolitan area counties. Since 135 employees decided not to work at the new location, and since most of their replacements are from near White Plains, about 450 people will be commuting from New York City's five boroughs, and from Long Island and New Jersey.

• **Help with the Moving**—The company wanted to hold as many of its experienced employees as possible, so it took steps to make moving palatable. First, it picks up the entire moving bill. In addition, it pays a month's salary, or \$1,000, which ever is less, and pays the income tax on the amount allowed. This allowance is for altering rugs and draperies and other changes that are incidental to changing homes. Besides this assistance, the company pays lease-cancellation penalties, offers a travel allowance if transportation costs are increased by the move, and gives a day off for moving the family.

# Bump that assures positive results

*When fire strikes, seconds count . . . your fire extinguishers must be the right type and function properly from the very start . . . failure means serious losses.*

The growing popularity of the highly effective powdered dry chemical fire extinguishing agent may be hampered by a drawback... settling or packing can occur after a lapse of time. However, with C-O-TWO Dry Chemical Type Fire Extinguishers there's no chance of this happening.

The exclusive inverting and bumping design of C-O-TWO Dry Chemical Type Fire Extinguishers provides mechanical breakage of the dry chemical by shifting its position in the cylinder. This outstanding mechanical breakage, plus continuous inert gas pressured agitation or fluffing of the skillfully blended free flowing dry chemical, guarantee lasting, foolproof fire protection.

No other brand on the market today gives you this extra margin for positive results. Inverting and bump-



ing is only one of many unique design advantages that make C-O-TWO Dry Chemical Type Fire Extinguishers your best buy for killing flammable liquid and electrical fires, as well as surface fires involving ordinary combustible materials.

With C-O-TWO Dry Chemical Type Fire Extinguishers the heat-shielding dry chemical is a non-conducting, non-abrasive, non-toxic, finely pulverized powder compound . . . blankets fire instantly. Sizes range all the way from 4 to 150 pounds capacity . . . all fully approved by the Underwriters' Laboratories, Inc., Factory Mutual Laboratories and Government Bureaus.

Act now for complete free information on these top quality, sure-acting fire extinguishers. Remember fire doesn't wait . . . get the facts today!



MANUFACTURERS OF APPROVED FIRE PROTECTION EQUIPMENT  
Squeez-Grip Carbon Dioxide Type Fire Extinguishers  
Dry Chemical Type Fire Extinguishers  
Built-In High Pressure and Low Pressure Carbon Dioxide  
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# Famous Bendix\* Starter Drive helped do away with cranking *and put 20 Million Women in the Driver's Seat!*



Small things bring great changes. Think what really happened in 1913 when the little but wonderfully ingenious Bendix Starter Drive became "the mechanical hand that cranks your car." By eliminating back-breaking cranking, the self-starter opened the car door to Woman's world.

The Great American Economic Revolution was under way and it hasn't stopped gathering momentum yet. Today nearly 20,000,000 women drive cars to places to spend an estimated 80% of the national take-home pay.

We are not claiming this would not have happened if it had not been for the wonderful Bendix Starter Drive; we simply point out that it did happen because this invention helped change the auto from a luxury for men only to the whole-family necessity it is today!

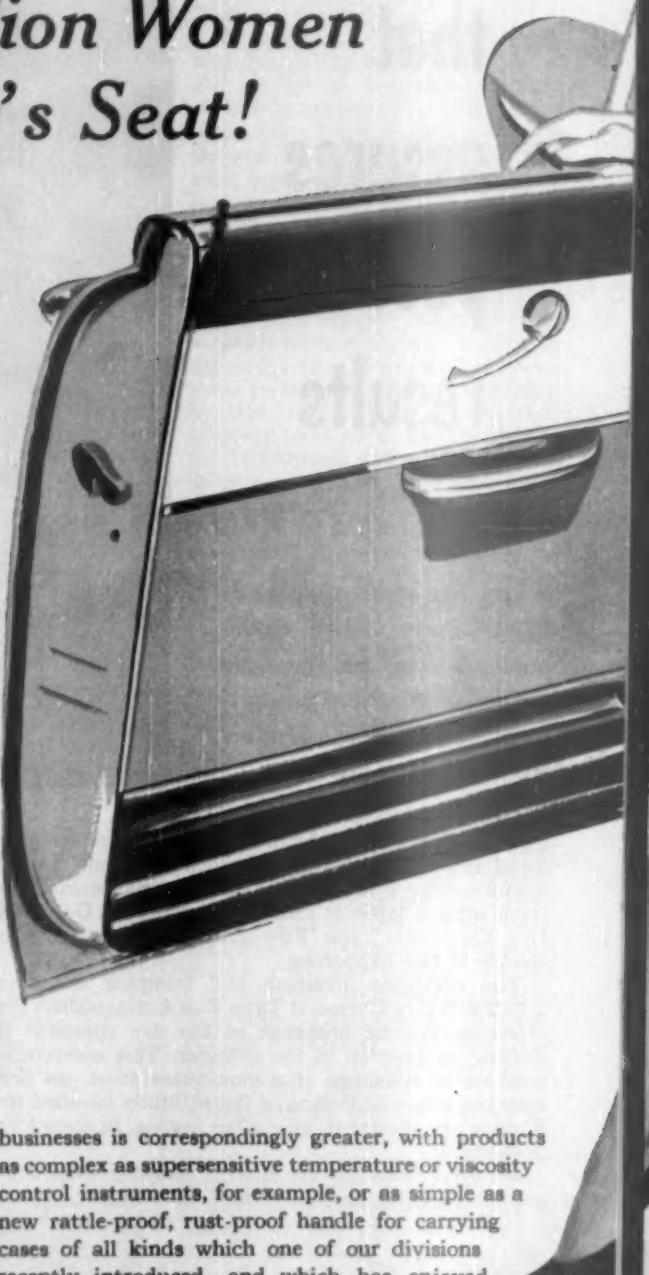
The Bendix Starter Drive also started Bendix Aviation Corporation—it was our first product. So many have been made, and so efficiently have they operated, that the "Bendix Drive" is a symbol of quality the world over.

#### Other Famous Bendix Names

Bendix Aviation makes scores of other quality automotive products with famous names—Stromberg\* Carburetor, Bendix\* Radio, Bendix-Eclipse\* Brake Lining, Bendix\* Brakes, Scintilla Magneto, Bendix\* Power Steering, and Zenith\* Carburetor are a few. Hundreds of other products for aviation, industrial and home use are turned out by our 25 manufacturing divisions.

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automotive brakes, carburetors, power steering;  
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**SCINTILLA, SIDNEY, N. Y.**  
aviation ignition systems; industrial engine  
magnets; diesel fuel injection.

**BENDIX RADIO, TOWSON, MD.**  
radar; auto, railroad, mobile  
and aviation radio; television.

**MARSHALL-ECLIPSE, TROY, N. Y.**  
brake blocks, brake lining, synthetic resins.

**ECLIPSE-PIONEER, TETERBORO, N. J.**  
aviation instruments and components; laundry.

**BENDIX FRIEZ, TOWSON, MD.**  
meteorological instruments; precision instruments  
and recorders.

**RED BANK, EATONTOWN, N. J.**  
electronic tubes; dynamotors, inverters.

**ZENITH® CARBURETOR, DETROIT, MICH.**  
automotive, marine and small engine carburetors.

**BENDIX-SKINNER, DETROIT, MICH.**  
micronic filters.

**PACIFIC, NORTH HOLLYWOOD, CALIF.**  
telemetering equipment; hydraulic and electric  
actuators; depth recorders; boat steers.

**CINCINNATI, CINCINNATI, OHIO**  
automatic viscosity regulators, nuclear products.

**BENDIX COMPUTER, LOS ANGELES, CALIF.**  
digital computers.

**BENDIX-ECLIPSE OF CANADA, LTD.**  
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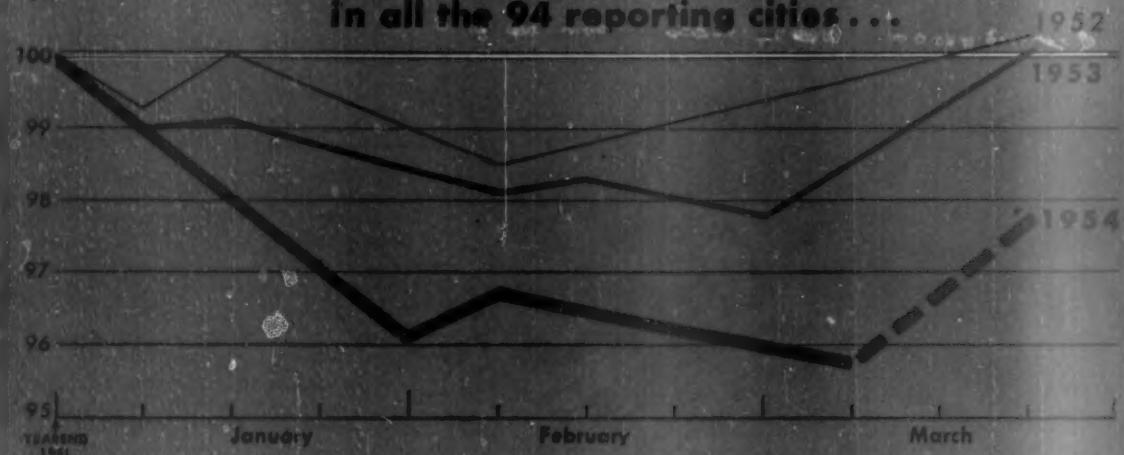
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# FINANCE

## IN 1954, BUSINESS LOANS . . .

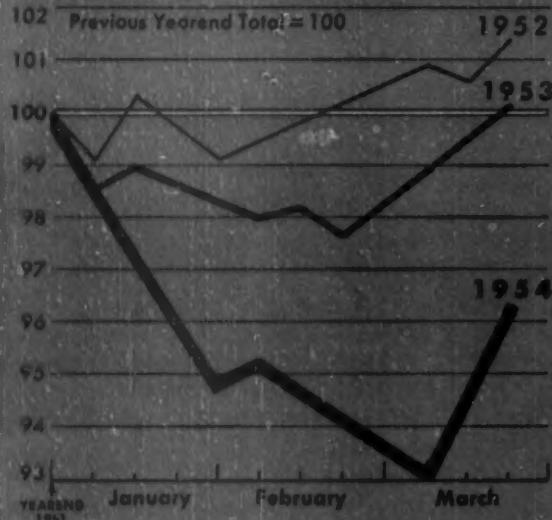
Previous  
Yearend Total  
= 100  
101

. . . Have slumped more and recovered less  
in all the 94 reporting cities . . .



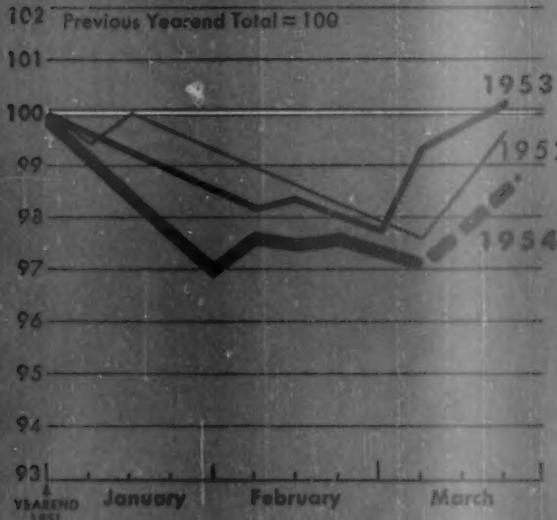
102 Previous Yearend Total = 100  
101

. . . But more so in New York . . .



102 Previous Yearend Total = 100  
101

. . . Than in the other areas



## Banks Cut Rates to Stir Demand

Company treasurers never batted an eye last week when they read in New York's financial pages that tax borrowings had raised the city's bank loans to business by \$225-million in a week, the largest such jump in history.

To the layman, the jump might seem to presage a hike in borrowing costs. But the treasurers had no such fears.

Their confidence that costs would continue shrinking was based on a far-reaching step taken in the same week by the Guaranty Trust Co.

• **Rate-Cutting**—Guaranty had taken a searching look at the local and national loan prospects. It decided all signs indicated that once the Ides of March were past, business demands for new

money would resume their earlier sharp slump, which had been especially notable in New York. Promptly, the bank jumped the gun on its competitors by cutting its prime rate on business loans—and its renewal rate on broker loans—from 3½% (BW-Mar.20'54,p34) to a flat 3%.

Guaranty's neighbors reacted to the

cut with shocked surprise. A few denounced the move as "not justified," but almost all local competitors jumped on the bandwagon. Then large banks in other areas began to follow suit; reports from everywhere indicated that the "New York rate" would be met.

• **Justification**—According to a Guaranty spokesman, the bank's cut in prime rate was fully warranted by:

• Federal Reserve's current policy of easing the money market through its open market operations in government securities and through its recent cut of the rediscount rate from 2% to 1½%.

• The drop in open market rates for commercial paper, particularly the offerings of the big finance companies. C.I.T. Financial Corp., for example, shaved the rates four times before Guaranty's announcement and once more after that. C.I.T. now offers 30-day to 89-day paper at 1½% and nine-month notes at 1¾—exactly 1% below the rates that prevailed last fall.

• The fact that "substantial sums have been coming into the New York market" seeking investment at "below the going rate."

• **Demand Is Down**—There can be no doubt that money supply has finally gone ahead of money demand. You can see this in the more than seasonal drop in volume of loans outstanding (chart).

Early months of the year always bring a reduction of loans as businesses repay what they have borrowed in late months of the preceding year. In the first 10 weeks of 1954, however, repayments ran far ahead of the normal pace.

Business loans of all banks reporting to the Federal Reserve System thus dropped \$905-million in the first 10 weeks of 1954. In the same period last year they dropped only \$251-million; the year before, \$184-million.

The downtrend was even more noticeable in New York than in other districts. In the New York district, companies borrowed a record-breaking amount this year to pay taxes, yet total volume of business loans last week stood \$306-million below its yearend figure. At the same point in 1953, loans were \$7-million above yearend; in 1952, they were up \$113-million.

• **Supply Keeps Growing**—Meanwhile, the supply of funds seeking gainful employment continues to expand. In February the mutual savings banks scored a \$116-million increase in deposits, the biggest gain ever recorded for that month. In January, life insurance sales gained 10%.

Federal Reserve purchases of Treasury issues in the open market have



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assured the commercial banking system of ample funds for investment, too. At the middle of last week, Federal Reserve member banks had excess reserves of \$1.1-billion on deposit with the Fed, compared with \$633-million in the tight-money days of a year earlier. Banks' borrowings from the Fed (rediscounts) were only \$267-million; a year ago borrowings totaled nearly \$1.3-billion.

• **Setting the Pace**—Technically, of course, all that the banks have done in lowering the prime rate on business loans is to ease the requirements for the cream of their borrowers: the few who have the highest credit ratings. In effect, however, the prime rate sets the borrowing cost for everyone, since interest rates for lower-rated borrowers are scaled upward from the prime rate.

In a time when money is begging for demand, you can't overlook another factor in the ease of corporate financing: Bankers always tend to get more liberal in granting loans. They won't admit it publicly, but when they have to hunt for people to take their money they are likely to grant the prime rate to borrowers who wouldn't possibly qualify in tighter times.

No matter how sternly the banks may resolve not to do this, the pressure is great. After all, the banks aren't the only source of business loans. Many life insurance companies are willing to make loans on fairly short terms. And the commercial paper market is a factor, too.

• **Commercial Paper**—Major finance companies, for example, are finding it cheaper to sell paper directly to investors than to use the credit lines they have in abundance with the banks. So are well-rated companies in other fields.

These companies find they can sell six-month notes through commercial paper brokers at interest rates as low as 2½%. Even after figuring brokerage commissions, the net interest rate figures out to less than the banks charge for similar loans.

Increasingly, the commercial paper market is making itself felt as a serious competitor of the banks for business loans. Dealers recently reported a total of \$700-million in notes outstanding on their books. That's the highest figure in more than 28 years. And to reach it, the dealers had to lure back many corporate borrowers who hadn't made use of that borrowing market in a number of years.

• **In Line Now?**—With demand down and supply—and competition—sharply up, the question in the money market is this: Has last week's cut brought the prime rate for bank loans in line with the rest of the market?

Many experts think it hasn't. Unless demand for loans should spurt, they say, there will be further cuts.

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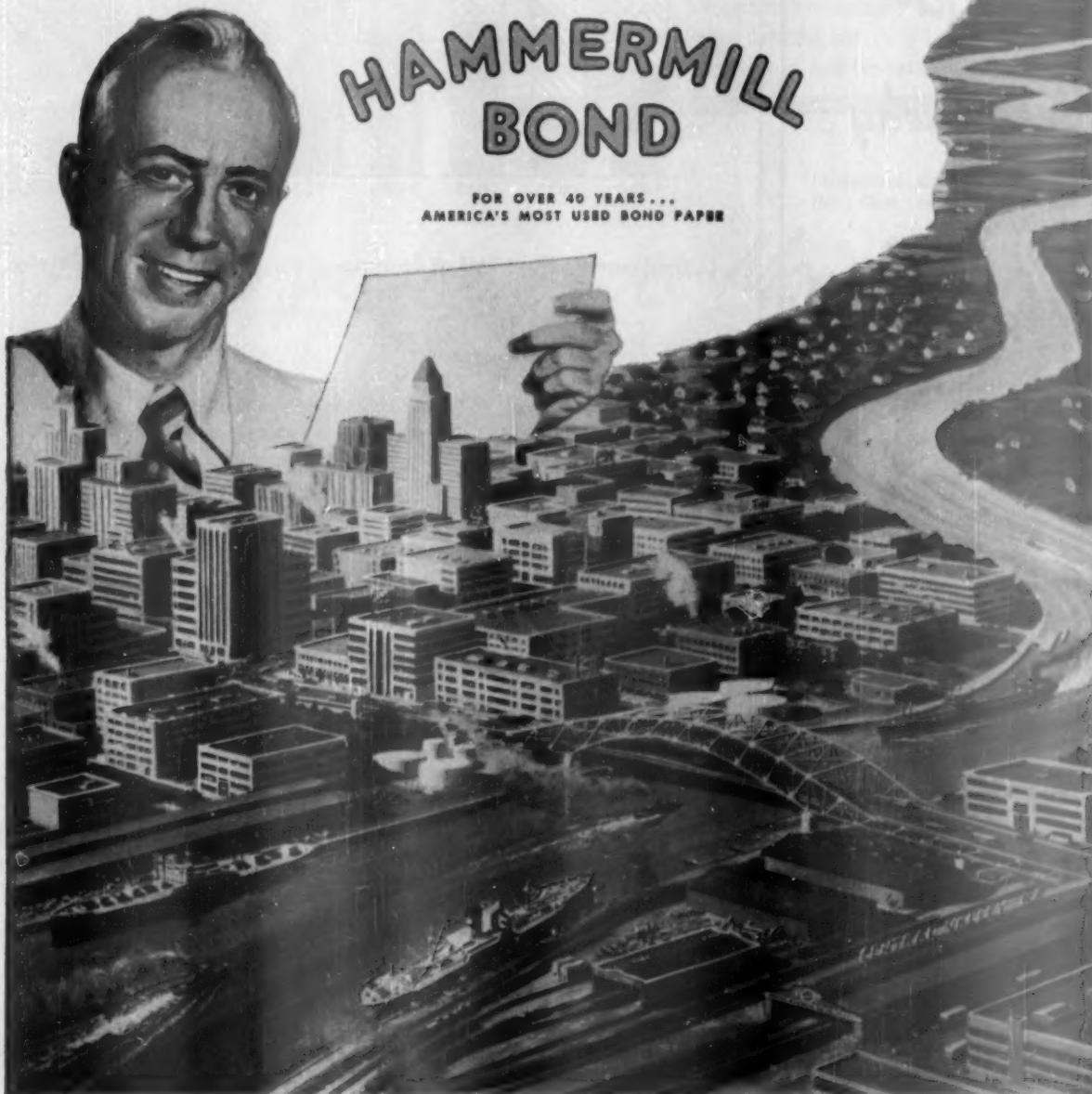
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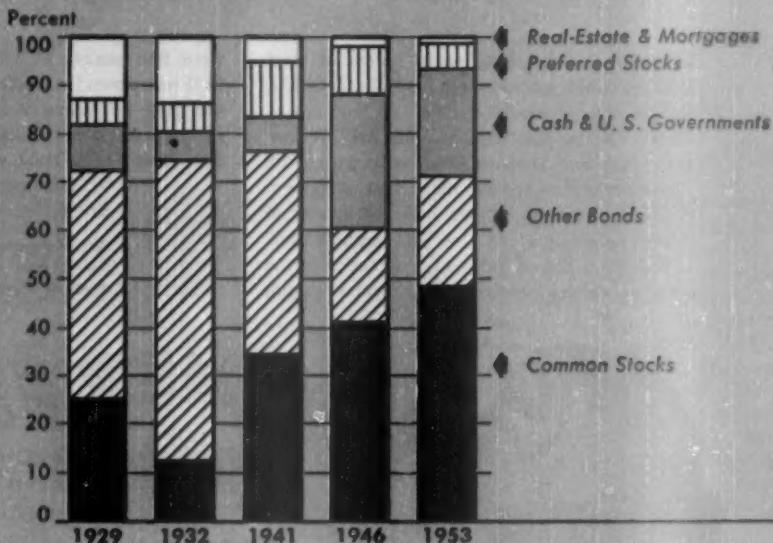
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## How Much Has the Investment Pattern of College Endowments Changed?

Here's the picture at Harvard — biggest fund of all . . .



. . . and here's the kind of commons they've preferred lately

	June 30 1953	June 30 1948		June 30 1953	June 30 1948
Public Utility	25.41%	12.72%	Paper	3.14%	0.71%
Oil	21.46	20.30	Electrical Equip.	2.76	1.24
Insurance	10.21	10.10	Food & Beverage	2.46	4.35
Railroad	5.48	1.59	Rubber	2.22	1.29
Chemical	4.98	8.89	Mining & Smelting	1.95	3.08
Bank	4.45	8.98	Farm Equip.	1.85	2.18
Retail Trade	3.18	7.75	Auto	1.77	1.83
Miscellaneous	8.68	14.99	TOTAL	100.00	100.00

Source: The Princeton Management Co.

BUSINESS WEEK

## Minding John Harvard's Funds

"A careful balance between fixed income securities and common stocks is the most satisfactory [investment policy] not only in today's high level economy and gradually depreciating dollar, but over long periods of time."

That's the old Massachusetts trustee investing rule that Treasurer Paul C. Cabot has been following for five years in managing Harvard University's \$308-million endowment fund (BW-Jun. 3 '50, p72).

The rule has paid off handsomely, not only for Harvard, but for dozens of other educational institutions. In these years, of course, Cabot and other investment managers were operating in a favorable investment climate. Com-

mon stocks were rising, and at the same time dividends and bond yields were increasing.

• **Summing Up**—Here's what happened to Harvard's money during the five years:

- Total investments have increased more than \$104-million, or around 50%. Of the increase, \$57-million represents new money, but remaining \$47-million is largely capital appreciation.

- Income from the fund was over \$11.7-million last year with a return on cost of 5.05% only a shade under the 5.08% for 1952, highest in 20 years. In pre-Korea 1949 the return was 4.44%. The low point for 20 years was 4.03% in 1945, when the fund came



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out of the war with 28¢ of each \$1 in cash and U.S. Governments. In 1941, the figure had been less than 7¢ per \$1. The rate of return was 4.33% in 1942, and 4.84% in 1937.

- In five years, the fund has been able to increase its payments to the university by 15%, despite continuing set-aside for lean years.

Paul Cabot is no tyro at managing investments. He is president of the State Street Investment Corp.—generally regarded as one of the best run open-end funds.

- **Win Goals**—Two of Cabot's top aims have been (1) picking securities that maintain the purchasing power of the university's investment income as far as possible, and (2) striving to "keep up with the depreciating dollar."

Pursuing these ends (chart, page 64), Cabot has increased common stock holdings to 49% of the portfolio, compared with 42.2% when he took over. This trend is pointed up in an analysis by The Putnam Management Co., manager of Boston's large George Putnam Fund, an open-end trust.

The trend toward commons, while inexorable over the years, has been uneven. Thus equities—at market value—made up 25.1% of the Harvard portfolio in 1929. By 1932 they were down to 12.4%. But then came a climb back to 34.7% by 1941, and to 41% in 1946.

During the Cabot era the uptrend accentuated until last year, when the percent dipped very slightly.

- **Bonds**—Fund policy has been just the opposite for bonds other than U.S. governments. In 1929 these bonds constituted 47.6% of the portfolio. In 1932 the percentage had been 62%; today it is 22.7%.

In holding back a portion of income "as a reserve against leaner times," Cabot has been continuing an established policy. From 1945 through 1949, the fund paid the university a flat 4% a year. Since then, with income rising, the rate has increased steadily—to 4.2% in 1950, to 4.5% in 1952, and to 4.6% in 1953, the highest rate in many years.

Even the 4.6% paid in 1953 permitted a set-aside of fair proportion—the difference between 4.6% and the 5.05% earned by the fund.

Last year holdings of cash and commercial paper were reduced \$8.5-million, mostly to buy bonds with maturities longer than five years.

- **Top Items**—Among the largest holdings of the fund are Standard Oil (N.J.), over \$7-million; Seaboard Airline Railroad, almost \$4-million; B. F. Goodrich, over \$3.3-million; Christiana Securities, \$3.2-million; General Electric, \$3.1-million; North American, about \$3-million; International Paper, \$2.5-million; Hartford Fire Insurance, \$2.1-million; General Motors, \$2-million.

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## PROFIT MARGINS: The Fourth Quarter Hit Them Hard

Net Before Taxes as a Percent of Net Sales

COMPANY	1st	2d	QUARTER 3d	4th		Year
				1953	1952	
American Can	10.1%	10.0%	11.1%	5.4%	9.5%	
Baldwin-Lima-Hamilton	9.7	8.0	8.7	9.1	8.8	
Celanese Corp.	8.8	9.8	7.2	0.7	6.9	
Chrysler Corp.	7.3	6.9	8.2	6.3	7.1	
General Electric	12.0	13.6	12.4	3.1	10.9	
Goodyear	3.1	0.4	20.4	23.6	13.1	
Johns-Manville	9.6	7.6	2.3	3.2	5.9	
Philco Corp.	10.4	12.7	6.3	8.1	9.5	
United States Steel	16.7	17.9	13.2	12.2	15.8	
Westinghouse	16.3	14.4	13.7	18.3	15.9	
Youngstown Sheet & Tube	10.6	10.4	10.1	7.5	9.7	
	8.8	8.5	10.8	9.7	9.5	
	15.3	17.6	16.9	8.2	13.8	
	16.1	18.0	13.7	14.0	16.2	
	10.2	15.4	6.3	-0.1*	8.2	
	6.8	5.7	4.8	9.5	6.9	
	24.8	24.5	24.8	14.1	22.2	
	26.4	24.5	24.5	20.3	23.8	
	13.6	16.8	17.6	8.6	14.2	
	15.0	-3.4**	7.9	9.4	9.3	
	12.1	12.4	12.6	1.1	9.3	
	13.4	13.5	12.7	7.3	11.4	
	10.7	11.1	10.8	10.1	10.7	
	14.0	1.2**	5.4	12.0	11.4	

Data: Standard & Poor's Corp.

\*\$832,923 deficit    \*\*steel strike

BUSINESS WEEK

## Why the Fourth-Quarter Dip?

Business last year was good—in some respects terrific—by almost any measure. But the over-all yearend figures on corporate earnings hide some fundamental shifts in the position of many companies.

For instance, profits in 1953 are estimated at \$43.2-billion, or \$4-billion higher than 1952 (BW-Feb. 20 '54, p25). Trouble was, the bulk of this total came in the first two quarters, with a slight third-quarter decline steepening into a real dip in the last quarter.

• **Sample Cases**—The 12 companies listed above provide a pretty fair cross-section of U.S. manufacturing, and they point up the wide dimensions of the slump. The list takes net income before taxes (thus excluding tax adjustments that might distort the picture) as a percent of sales. It shows profit margins holding steady for the first three quarters (excepting Chrysler), then fading badly in the fourth.

Of the 12 companies, seven showed drops of 50% or more in profit margins from the third to the fourth quarter. In

several cases, there's a ready explanation for the decline:

Philco, which had a record \$35-million in pretax earnings for the year, showed a deficit of \$832,923 in the last quarter, largely because of excessive inventories and heavy retooling on a completely new appliance line.

U. S. Steel, with record sales at \$3.8-billion for the year, saw its profit margin decline by 52% in the fourth quarter when sales dropped sharply.

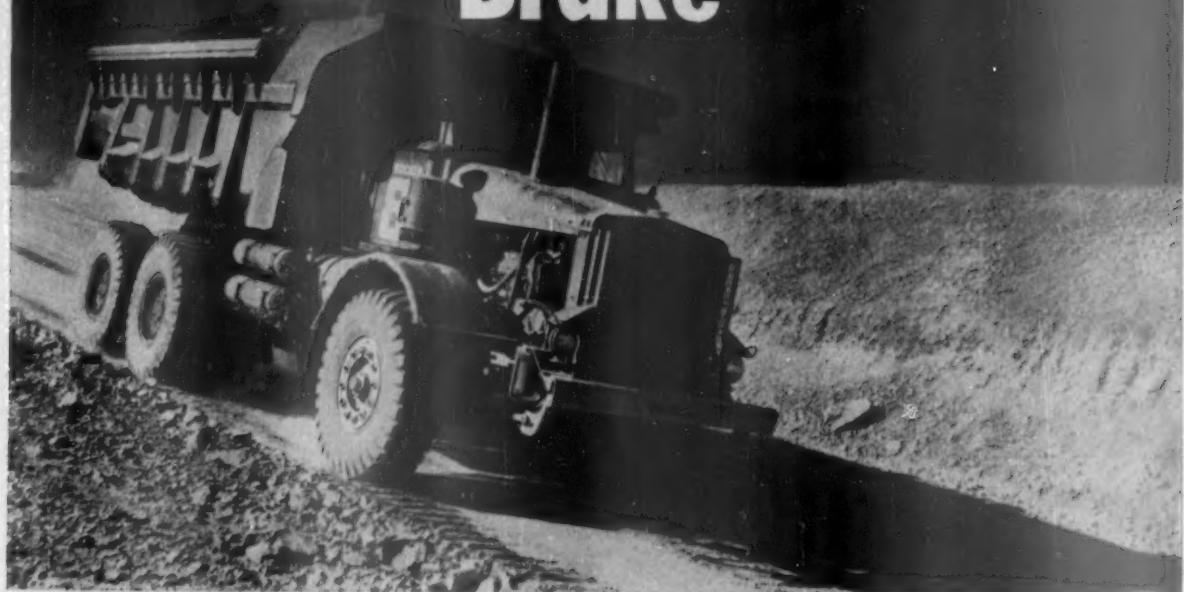
American Can was hit by a strike in December that accounted for a large part of its drop.

Union Carbide attributes part of its 57% dip to end-of-the-year accounting adjustments. The company also had a \$5-million depreciation and amortization write-off on new plants in the fourth quarter.

• **Deepest of All**—Westinghouse showed the most drastic drop of all, with pretax net as percent of sales nosediving from 12.6% to 1.1%. Westinghouse's situation was in some respects unique, but it emphasizes the troubles in appliances

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BRAKE saves the regular friction brakes for complete stops or "snubbing" on curves. There are no wearing parts to burn up or wear out. Oil does all the braking work. The TORQMATIC BRAKE is installed as an integral part of the drive line in trucks equipped with Allison TORQMATIC DRIVES—uses the same oil as in the TORQMATIC Converter so there are no freezing problems in winter.

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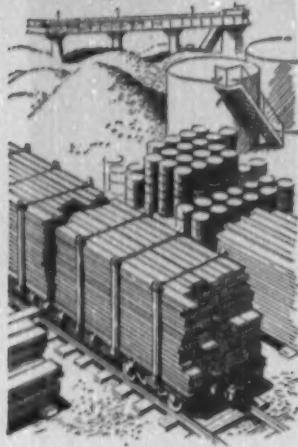
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### Industrial Location Service of New York State

"WE DON'T SELL SITES—WE MATCH NEEDS!"

generally. The four major reasons cited for the company's poor showing in the last quarter are:

- Initial production costs for a large number of new plants.

- Advertising expenses rose sharply in the last quarter, due largely to promotion related to the new facilities.

- Research and development costs allocated to the last quarter.

- Like Philco and others, Westinghouse experienced a slump in TV sales and had to cut prices on black-and-white receivers.

- No Harbinger**—Rising costs and their inflexibility were a major factor in the shrinkage of profit margins. With companies rushing to charge off everything possible before EPT went off the books, and with competition and price-cutting increasing, costs loomed large in trimming profit margins.

Whether or not fourth-quarter profit margins presage a like drop for the first quarter of 1954 is questionable. Wall Street is already cocking a cynical eye at the fourth-quarter showing as the product of peculiar tax situations. It is more concerned with watching reports of rising TV sales, construction activity, auto production, and a slashing of inventories.

### FINANCE BRIEFS

Deposits in the nation's 528 mutual savings banks hit a new high in February with a \$24.7-billion total, up \$116-million from January's figure. During last month, the banks increased their mortgage holdings by \$108-million and corporate and municipal securities by \$48-million, but holdings of government bonds dipped \$3-million. New York state banks accounted for a gain of \$57.9-million—nearly half of the national total gain.

**Safeway Stores, Inc.**, last week registered a \$26.8-million convertible preferred issue with the Securities & Exchange Commission. Proceeds from sale of the 268,740 shares will bolster working capital and repay short-term loans.

**Liquor sales** are down nearly 8% from a year ago, but common stock of American Distilling Co. has risen to 43½ from a year-end mark of 31½. Reason: rumors in Wall Street that the company may declare a liquor dividend. A decade ago, such "dividend-in-kind" payments sent whiskey stocks kiting.

**Short interest** on the New York Stock Exchange hit 2,792,457 shares on Mar. 15, highest level since May 4, 1932. Short positions were held in 963 issues, against 951 a month earlier.

# For the Record

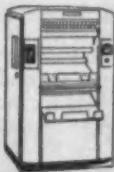


*Alva W. Phelps, Chairman of the Board, The Oliver Corporation*

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*From an Article by  
Alva W. Phelps*

*Chairman of the Board  
The Oliver Corporation  
Chicago*

The first step in the mechanization of farming—the development of power machinery for farm operation—brought about a larger increase in the farmer's productivity than it did a reduction in his physical effort. But to lighten the farmer's physical work load, to improve his controls, and to make possible specialized types of farm machinery, hydraulic equipment is being widely applied in the farm-equipment field today. Tractors, tractor-drawn implements, loaders, planting machines, harvesters, and baling machines are among the farming functions now being handled hydraulically.

There are still many manual farm jobs which remain to be mechanized, and hydraulics may well be a part of new developments in this direction because of its simplicity, versatility, and dependability. Variable speed hydraulic drives may, because of their flexibility, offer possibilities for tractive and auxiliary drives.

Future farm machinery of a general type is likely to be more automatic in its controls; and if labor costs continue to rise, a sizable field for highly specialized farm machinery may develop. There is future as well as present opportunity for the hydraulics industry in the farm-equipment field.

As in business and industry, agriculture is continuing to mechanize and modernize for greater productivity, providing further benefits for the welfare of mankind.

CHARLES BRUNING COMPANY, INC., 4700 MONTROSE AVENUE, CHICAGO 41, ILLINOIS

## Mortgage Mart

New exchange in New York will hold auctions of liens. It's designed to make mortgages more liquid.

A new operation at an unexpected site will be added to New York's financial scene on Apr. 6. The site is the Hotel Roosevelt, where the New York Mortgage Exchange will hold its first auction sale, with first and second mortgages from the Greater New York area going under the hammer.

The exchange is sponsored by the Lawyer's Mortgage & Title Co., of New York, whose president, Harry Fromkes, also heads the exchange. Thomas G. Grace, chairman of L.M.&T., will double as chairman of the exchange.

Auctions will be held twice a month, with lists of the liens for sale going out in advance to prospective buyers. All sales will be for cash, 5% down and the rest within 30 days. Sellers will pay the 2% commissions. At the start, the exchange expects to limit itself to New York area mortgages, but later it hopes to list FHA and Veterans Administration insured mortgages from all over the country.

• **Conversion**—Fromkes says a main purpose of the auctions is to provide a medium for converting mortgages into cash before they come due. The existence of such a medium is expected to enhance the value of mortgages, and to make sellers of property more willing to accept a mortgage as part payment, since they will be sure of ready conversion into cash.

The exchange will also provide a market for mortgages that have not yet been placed. Such paper can be listed by the title owner, with the expected result that buyers can find financing that may have been refused to them elsewhere.

• **Prospects**—Institutions and brokers in the mortgage business show a wide range of opinion on the exchange's prospects. Most of them concede that there is a real need for such a market, so far as second and third mortgages are concerned. That's because the big institutions that provide so much mortgage money are largely restricted to first mortgages.

Such institutions don't expect to enter the exchange to any extent, since they already have channels for securing first mortgages either directly or through brokers. There is little trading in these liens, which are held for investment.

The exchange is expected to do a livelier business in second and third mortgages, where speculation is more frequent.

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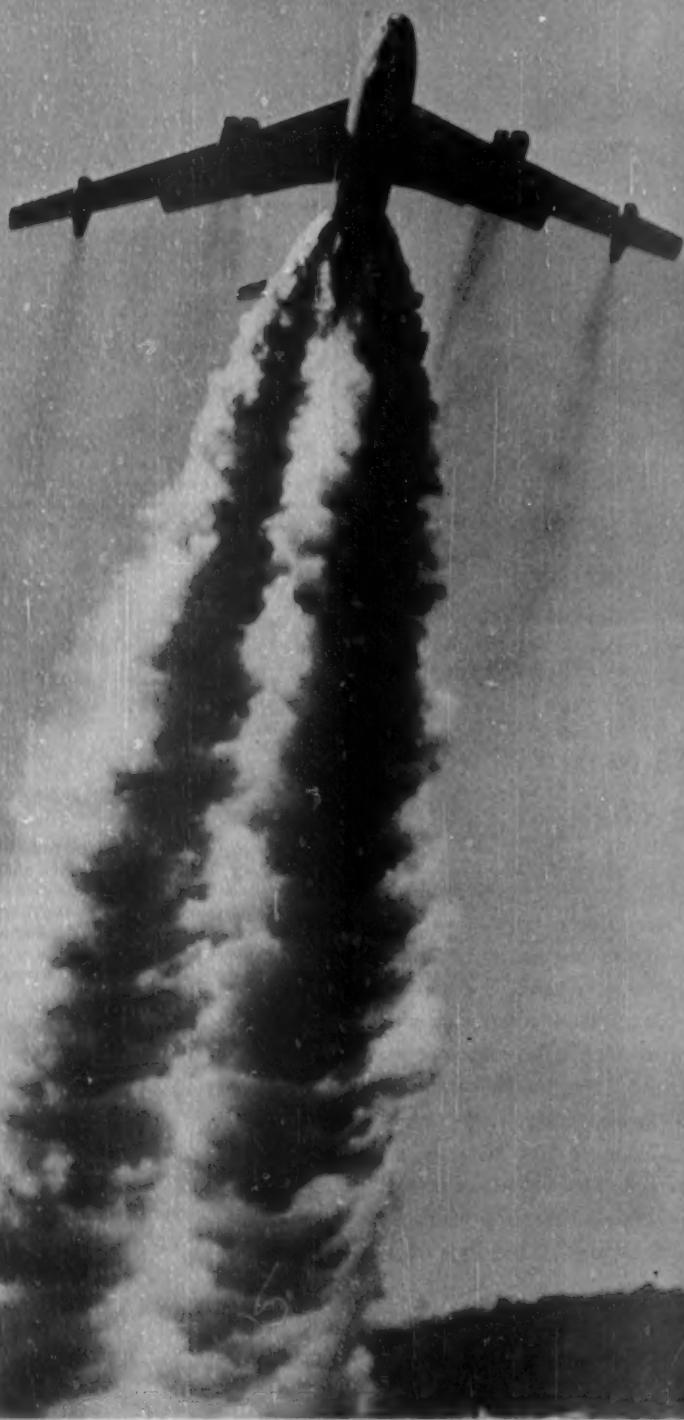
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# MUNITIONS



BACKBONE of atom-air power is the B-47 bomber, above in rocket-assisted take-off.

## Gearing Up

With some creaking and much groaning, the U.S. military force is turning onto a new course. President Eisenhower and his military planners have laid out a policy calling for a smaller outlay for manpower and conventional armament—with airborne and hydrogen weapons making up the difference.

Eisenhower and the Republicans are fashioning the kind of military force they think the country can and should support—not just for now but for the foreseeable future. Basis of their planning: the assumption that there will be no open and general warfare for the next few years.

• **Transition**—The transition from the Korea-raised fighting force is just beginning. Divisions will still be kept in Korea and Japan to discourage a new outbreak of fighting in the Far East. Divisions will still be kept in Western Europe to encourage our allies to stand up to the Soviet threat there.

Each succeeding decision on military policy, and each succeeding budget, will play down the large mustering of men, and broad armament production base. At the same time, it will play up the guided missile and the jet bomber with its electronic gadgets.

Administratively, such a changeover is not hard to order and not impossible to carry out, even in such a huge and well-established a machine as the U.S. defense force. Politically, as the Eisenhower Administration is finding out, it draws fire from many sides.

• **What Kind of War?**—The most publicized defense controversy of recent weeks revolves around this point: What kind of war is the "new look" military force designed to fight?

Secretary of State John Foster Dulles touched off the debate last month when he expressed the "massive retaliation" concept. He seemed to say that the U.S. won't let itself be sucked into another Korea, that the next time the Reds stepped out of line we would drop atom bombs on Moscow or Peking—the Soviet bloc's centers of power—rather than fight locally on the Reds' terms.

Both our allies and our people at home bristled at the implication that World War III, the first atomic war, could be started so easily. And the Administration has been falling back from the first impression made by Dulles' speech. The new line is this:

• We will build up our air power and atomic strength for the long pull.

# to Air and Atom War

• We aren't committed to any automatic response to Red aggression. We will maintain the capacity for massive retaliation on Red capitals, but we retain the choice of reacting in many other ways, including the way we did in Korea.

• **Backing It Up**—At his news conference this week, old soldier Eisenhower kept his flanks protected. He didn't commit himself to a battleground. He implied that we were prepared to fight a little war, if need be. But he also called for a ready striking force to bomb Moscow if World War III becomes inevitable.

Dulles, too, rephrased his "massive retaliation" idea. Writing in Foreign Affairs magazine, he said his earlier remarks should not be construed as "bomb Moscow, come hell or high water," but as assurance that the U.S. will be equipped to handle any situation.

• **Not Enough Money?**—The other hot controversy over Eisenhower military policy began with groans from the armed services. None of the three branches of defense is satisfied with its budget. Even the Air Force, which gets the biggest share in the "new look" budget, is unhappy.

President Eisenhower and Defense Secretary Charles E. Wilson have asked Congress for \$38-billion for defense. That's a cutback from the demands of the Korea era, 1950-53. It's still a long way from the \$13.8-billion earmarked for defense in 1949-50, under Truman and Defense Secretary Louis Johnson. Yet friends of the military are already likening it to that pre-Korea economy move.

Economy is again at the root of the cut in military budgets, as it was in Johnson's time. The Republicans are working desperately to chop down deficits that threaten again to break through the \$275-billion debt ceiling. But the civilian decision-makers who oversee the military spending are also aware of the needs of worldwide strategy. They feel they are taking a safe gamble that reduced budgets will get us unscathed through the transition period while scientists and engineers are taking the bugs out of the machinery of pushbutton warfare.

## I. Unhappy Warriors

None of the three services is happy with what the President had decided.

The Air Force says if it has to be ready to press an attack to the enemy's heartland it should have at least 143 wings—not the 137 wings that are promised by 1957.

The Navy has been cut below what it considers a safe minimum for a mission of either the "Korea" or the "Moscow" type. It feels the new carriers of the Forrestal class that can fly the atom bomb don't make up for the decommissioning of half a hundred major units of the fleet.

And the Army spoke last week through its chief of staff, Gen. Matthew Ridgway. It complained that it has been cut in fighting strength while it still has its same old mud-slogging mission for the immediate future.

• **Tomorrow's Fighting Force**—The President and his secretary of defense are determined to ride out this wave of military gripes. The demands of economy in a time when business is sliding off, plus the relative peace with no U.S. shooting going on, have resulted in this conception of U.S. military might for the next several years:

• An air force dominated by 55 wings of atom-bomb carriers for long-range attack and 37 wings of fighters and interceptors to stave off a massive attack on the U.S. plus another 34 combat and 11 noncombat wings for support and supply.

• A million soldiers to guard the outposts of the NATO countries and to blunt an enemy land attack, to keep the truce in Korea, and to form the nucleus of a World War III army.

• A navy without peer in the world, equipped to supply the advance bases of strategic bomber planes, armed with a striking force of 16 aircraft carrier groups and 15 anti-submarine squadrons, plus the conventional naval forces to defend against submarine attack.

• **Shortcomings**—If you read this concept quickly you can feel smug. But a little deeper digging will reveal gaping weaknesses in this lineup:

• The Strategic Air Command is strong in piston-engined giant B-36s and modern jet B-47s, but it is years behind in pushbutton gear that you might assume it has now if you read the publicity. And the highly touted bigger and faster B-52 jet bombers won't be ready to operate until next year.

• The Army is woefully weak on career men who would form the cadre



## Are You Making the Same Mistake?

Johnny doesn't have a sweater—and Susie wasted her time and material, all because she didn't check as she went along!

Many manufacturers make this same mistake. They spend thousands of dollars processing metal parts that have invisible defects which make the finished product worthless. It is more logical to find these defects before or during manufacturing.

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or a wartime training force. It depends chiefly on 24-month draftees.

- The Navy is holding out for its own striking force of airplanes and missiles—meanwhile it finds itself almost in defense against atom-carrying Snorkel submarines and not very strong in its own underwater striking force. The atomic-powered Nautilus, launched in January, is a promising addition to the undersea fleet, but it is a year from operational status. A second atom sub, Sea Wolf, is on the way, but other atom submarines are just a gleam in the eye.

- **Manpower Weakness**—A wide gap in all services is in manpower capable of being trained as technicians. The Army is most dependent on draftees—who are released to civilian status just as their experience begins to pay off.

As a stopgap, Defense is farming out some of its technical maintenance work to private industry. Ironically, this helps the civilian suppliers to offer better pay than the military can for the same work.

So far, the Administration has found no answer to the problem.

- **Beginning to Begin**—Obviously, the Eisenhower team has only begun to begin—and not much more than that. It's going to take some years before the plans become reality.

Delivery of new weapons to the Defense Dept. has been slow, because the art of designing and mass-producing modern weapons is progressing at a snail's pace. True, we have jet fighters and bombers, but most of them still operate with World War II armament—machine guns and light cannon. The air-to-air missiles that should go with such planes are still a long way from mass production.

The automatic-piloted interceptor such as the Consolidated Vultee F-102 (BW-Mar. 6 '54, p28) is still in experimental state. Its design for searching out and shooting down an enemy bomber automatically is far from being perfected. The Army's Nike antiaircraft missile, the ground-to-ground Matador, and the Navy's ship-to-shore Regulus, though in production and operation, are not yet fully satisfactory (BW-Feb. 27 '54, p78).

The worth of the Army's great atomic cannon is still being argued in the light of the new emphasis on lightning mobility of troops and on dispersing the battle lines.

From a military point of view, the entire field of electronics leaves a very great deal to be desired. A top Navy official declared just recently that electronics has "virtually stagnated since 1946."

Take air defense. Aircraft detection is in a deplorable state. Radar equipment used for the purpose is in incredibly short supply, and most is obsolete. For aircraft spotting, we must

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**THE PROBLEM.** Aware of the trend to smaller, lighter products, Edison engineers set out to create the V.P. Voicewriter—a personal dictating machine compact enough for carrying in a brief case, yet sturdy enough to match the performance of larger units. Several of the V.P.'s vital parts pre-

sented a serious problem of material selection. Besides meeting the over-all objective of space saving, these parts would be required to have a variety of special properties to facilitate assembly and to maintain Edison's high standards for service-free performance.



**THE SOLUTION.** Thanks to high strength, versatile Beryllium copper, these critical components do a big job, take up little room in the production model of the V.P. Beryllco provided every

required feature—both space and performance requirements—in more than adequate measure. And the V.P. was easier to assemble because several of the Beryllco parts could be highly stressed without damage.

**PERFORMANCE PLUS.** Edison selected Beryllco beryllium copper not for one valuable property, but many. Conductivity, hardness, stress resistance, wear resistance, nonmagnetic qualities, spring qualities, ability to be fixture heat treated without loss of elasticity—every one was important. In all these requirements Beryllco delivers performance plus. That's why it has enabled manufacturers of such diverse things as bearings, precision switches, controls and machine tools to make smaller, lighter, more efficient products. Beryllco can help you, too. For sample material or engineering assistance, write THE BERYLLIUM CORPORATION, Dept. 4C, Reading 20, Pa.

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still depend in large measure upon volunteer civilian ground observers.

The consensus is that by 1960 we may have the sort of military fighting machine in being that we talk of as being here today.

### II. War of the Future

Any time between now and 1960, the outbreak of war will have little resemblance to anything the U.S. military man has ever experienced up to now.

The Mar. 1 test of a hydrogen bomb at Eniwetok surpassed in devastating force the imagination of even the makers themselves. That bomb, launched from a modern jet bomber, would destroy a New York, a Cleveland, a Detroit—or a Magnitogorsk.

President Eisenhower says there never will be another Normandy D-Day in the manner of June 6, 1944. The "invasion" will be by plane or missile, with warheads of the atom bomb or the hydrogen bomb.

So the "new look" must in the next decade become the "electronic look." That is, the planes of today will still fly, but they will fly more accurately and fire more accurately. The missiles that go haywire on the Banana River in Florida today (BW—Feb. 27 '54, p78) will fly true to a selected target.

• **Little More Shrinkage**—You'd think, perhaps, that with such pushbutton weapons the need for military manpower would shrink—and that your sons would not be needed so much in time of war. But the very people who are shepherding the new gadgets figure this way, instead:

- It will take the present 1-million-man air force—or more—to service, direct, and fly the airplanes to deliver the firepower of the 1960s.

- It will take the 1-million-man army to staff continental defense anti-aircraft units, to protect the bases of our bombers, and to be in readiness for any small actions that arise.

- It will take a navy of at least present size to carry out worldwide missions.

It simply boils down to the same number of men, or more, but men who are equipped with far greater firepower.

Short of a complete peace, the military thinker today sees only a continuing \$35-billion to \$40-billion a year military budget, a 3-million-man military force, and the hope of the inventive devices that the drawing boards promise today.

Along with the mechanized weapons of the future, the nation needs a new breed of fighting men. We are already developing men capable of harnessing the gadgetry and firepower of the new weapons. For a close-up of how we are doing it, turn the page.

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Here's a day in the life of Col. Elliott Vandevanter of the Strategic Air Command. In many ways, he typifies the "new look" of U.S. defense. He's a . . .

## New Kind of Man



**7:10** He helps with the mandatory hours-long check of the B-47 in which he's to fly.



**8:30** Ready for takeoff. Colonel's face is serious; he sees his job as a job, not an adventure.

**6 A.M.** Col. Vandevanter leaves his office for one of his infrequent trips aloft.

THESE faces are those of the men of today's Air Force—mature, serious-minded, most of them in their thirties, most of them married. In civvies, they'd easily be mistaken for young business executives.



## for a New Kind of Air Force Job

(Story continues on p. 82)



**8:15** Check is complete. Vandevanter is going along to find why crew's bombing aim is off.



**2:30** Crew hasn't performed well. Worried, Vandevanter talks it over with crew's squadron chief.



**2:45** He's tired, but he still has much to do. Flying is only part of his job (next page).



**PAPERWORK** takes up much more of Vandevanter's time than flying.



**TROUBLESHOOTING** is a key chore. Here, he checks on engine repair.



**STAFF MEETINGS** like the one above help the colonel coordinate the three-squadron wing



he commands. Every air power development in the last 15 years has made him less a flyboy and more a manager.



**INSPECTION** —paralleling a business executive's field trip—helps Vandevanter see plant and personnel firsthand.

## Most of All,

This is Col. Elliott Vandevanter of the U.S. Air Force. A little over 12 years ago, on Dec. 10, 1941, he helped man a B-17 flying in defense of the Philippines. It was the first U.S. bomber mission of World War II. Today, he commands the 305th Bomber Wing of the Strategic Air Command.

Because of the role that the Strategic Air Command plays in the country's air arm and because of the role that the air arm is now assigned in the military establishment, Vandevanter in many ways typifies the U.S. defense program. The lion's share of the billions that are going into the defense budget (page 74) are intended to help him and the other men in his position do their jobs.



## He's an Executive (Story starts on p. 80)

**The Product**—The Strategic Air Command (SAC), of which the colonel is a member, has but one product. Gen. Curtis LeMay, SAC's chief, describes the product as training hours. Viewed in another way, the product can just as accurately be described as instant combat readiness.

Around that single product revolves Col. Vandevanter's whole life. He and his men, and their jet-powered B-47s, must be ready to take off instantly—fully equipped, fully briefed, ready in every respect—as the first frantic announcement of an enemy attack comes shrieking off the wires. They must be ready to take a devastating load of atomic bombs anywhere in the world.

Their goal, in SAC's words, would be to "destroy the vital elements of the enemy's war-making capacity to the extent that they no longer would have the will or the ability to wage war."

It's Col. Vandevanter's job to keep himself and his command ready for that day. He must act always as though the day were tomorrow. Nobody at SAC can let himself slack off even for an hour.

That's a tall order. It requires a breed of men very different from the devil-may-care "flyboys" of World War II.

### I. The Executives

Col. Vandevanter will be 37 years old

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"... their prime concern is for the security and the comfort of their families . . ."

AIR FORCE starts on p. 80

this June. He was married in 1947, has a five-year-old daughter and a three-year-old son. He enjoys playing tennis and playing the piano. Like millions of other U.S. citizens, he has been caught in the grip of the do-it-yourself fad. He builds things around the house. He likes to play with his children; right now he's teaching his daughter to ride a bicycle and his son to hit a tennis ball.

Like most other men with jobs, the colonel likes to go home at the end of each day and relax. Whenever he can, he spends his evenings with his wife and goes to bed early. In short, he is a family man.

• **Quiet Place**—Most of the other flyers at MacDill Air Force Base (Tampa, Fla.), where the 305th is stationed, are the same way. They are serious-minded men in their thirties, almost all of them married. Their prime concern is for the security and the comfort of their families.

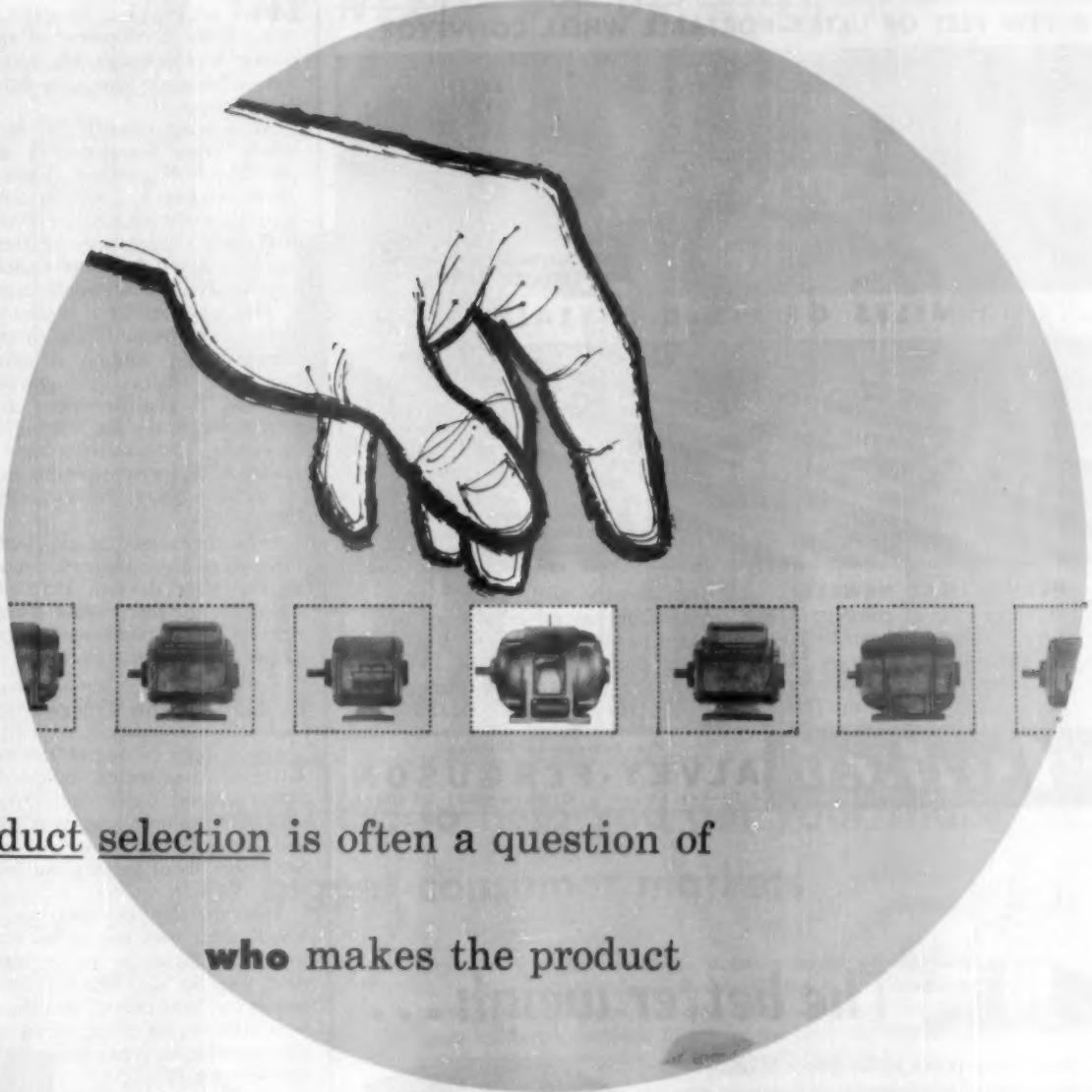
The World War II flyboy is gone. A pilot of the Strategic Air Command would shudder at the thought of wearing cowboy boots, or of spending night after night partying at the officers' club. MacDill's officers' club is one of the quietest places on the base.

The nature of these men's job has something to do with the change in them. So has the nature of the planes they fly. The B-47, they'll tell you, is an "unforgiving" airplane. It doesn't cover up for mistakes or smile indulgently upon horseplay. It's filled with immensely intricate electronic gear, powered by engines that can push it to speeds over 600 mph. and altitudes near eight miles.

For the men who fly this unforgiving weapon of war, a good night's sleep is not only advisable—it's mandatory. A hangover would be sheer suicide.

• **Chamber of Commerce**—Wherever you go on MacDill, or on any other SAC base, you find a personality type that parallels the middle management class of a modern industrial plant. The men are dead-serious about their jobs, ambitious for promotion. Each man is a walking encyclopedia of his particular end of the trade. The only difference you might notice between LeMay's men and an industrialist's men is that the pilots have a certain taut physical trimness. Unlike the young business executives, the pilots practice judo as a part of their training.

You can carry the comparison between the two groups to levels deeper than mere appearance. Many SAC



product selection is often a question of  
**who** makes the product

The **real advantages** of doing business with some suppliers often are not discernible in the product at all! Rather they are found in the calibre of the people who make it, and reflected in the balance sheets of the people who buy it.

Take **A. O. Smith** electric motors, for example. Interlaced with the motor windings are the stability and dependability of our organization as a supplier. Fused into the rotor are the foresight and flexibility of our management and engineering teams. Readily integrating with their counterparts in a customer's organization, they assist in executing plans to ease his inventory burden, to free his frozen capital.

**Notable improvement** in production efficiency, in personnel, and in profit opportunities is induced in his plant because his

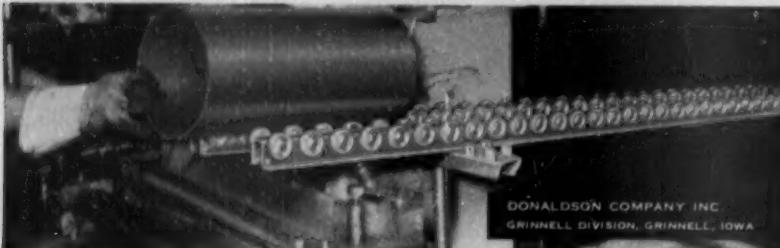
management looked beyond the motor we make and saw *who* makes the motor.

These things we are glad to talk about with interested principals of firms who buy power components and seek a better way of doing business with purveyors.



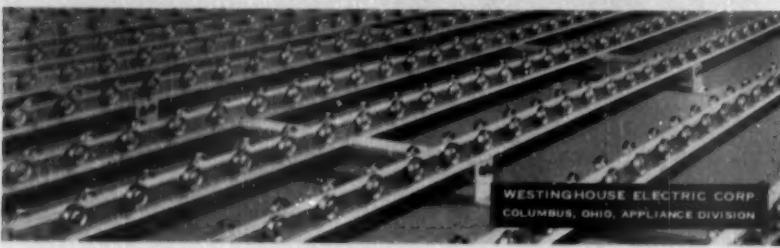
Factories at Tipp City, Ohio, and Los Angeles, California  
 International Division: Milwaukee 1, Wisconsin

## A FEW FEET OF ULTRA-PORTABLE WHEEL CONVEYOR..



DONALDSON COMPANY INC.  
GRINNELL DIVISION, GRINNELL, IOWA

## ... OR MILES OF FIXED INSTALLATION!



WESTINGHOUSE ELECTRIC CORP.  
COLUMBUS, OHIO, APPLIANCE DIVISION

HERE'S THAT NEWEST, most versatile type of conveyor—A-F Live Rails which can be spaced on portable stand tops to suit diameter or width of part or product being moved; or fastened

permanently with batten couplings, dis-assembled and set up again to meet new product handling problems. 5 ft. or 10 ft. lengths; straight or curved. Write for new free catalog.



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**ALVEY-FERGUSON**  
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## The better weigh...

Better because this Pitney-Bowes Mailing Scale has an automatic pendulum mechanism that's fast-acting, yet extremely accurate, absolutely reliable—won't waste postage by overweighing, or embarrass you by sending letters out with insufficient postage.

Better because its hairline indicator never wavers, shows the exact weight. The wide-spaced markings are easy to read, save time and postage in mailing... Also available, special models for parcel post. Ask the nearest PB office to show you. Or send for free illustrated booklet.

**FREE:** Handy wall chart of Postal Rates with parcel post map and zone finder.

### PITNEY-BOWES Mailing Scales

PITNEY-BOWES, INC.  
1485 Pacific St., Stamford, Conn.

Originators of the postage meter  
... offices in 93 cities



officers actually are, in effect, executives. Every development of air power during Vandevanter's 15 years in the service has made him less a fighter and more a manager.

As a wing commander, he stands astride three squadrons—45 bombers plus 22 refueling tankers. Each B-47 is worth roughly \$2.3-million (compared with \$190,000 for a B-17). With every B-47 goes a flying crew of three men and a big ground crew of skilled maintenance men and electronic technicians.

This adds up to a tremendous responsibility for the wing commander. Vandevanter's position is much like that of an executive heading a company division. By far his most important work comes under the heading of management. He watches over supply, maintenance, personnel—and the quality of the product. He flies only about once a week.

Even the airmen at the bottom of the scale of responsibility are more than mere airplane drivers. Most of them are so-called "four-headed monsters"—cross-trained as pilots, navigators, bombardiers, and radar technicians.

## II. Day at the Office

For a sharp picture of the new Air Force at close range, follow Vandevanter around for a day. You'll see what his problems are—both business and personal; you'll also see just how SAC goes about turning out its product.

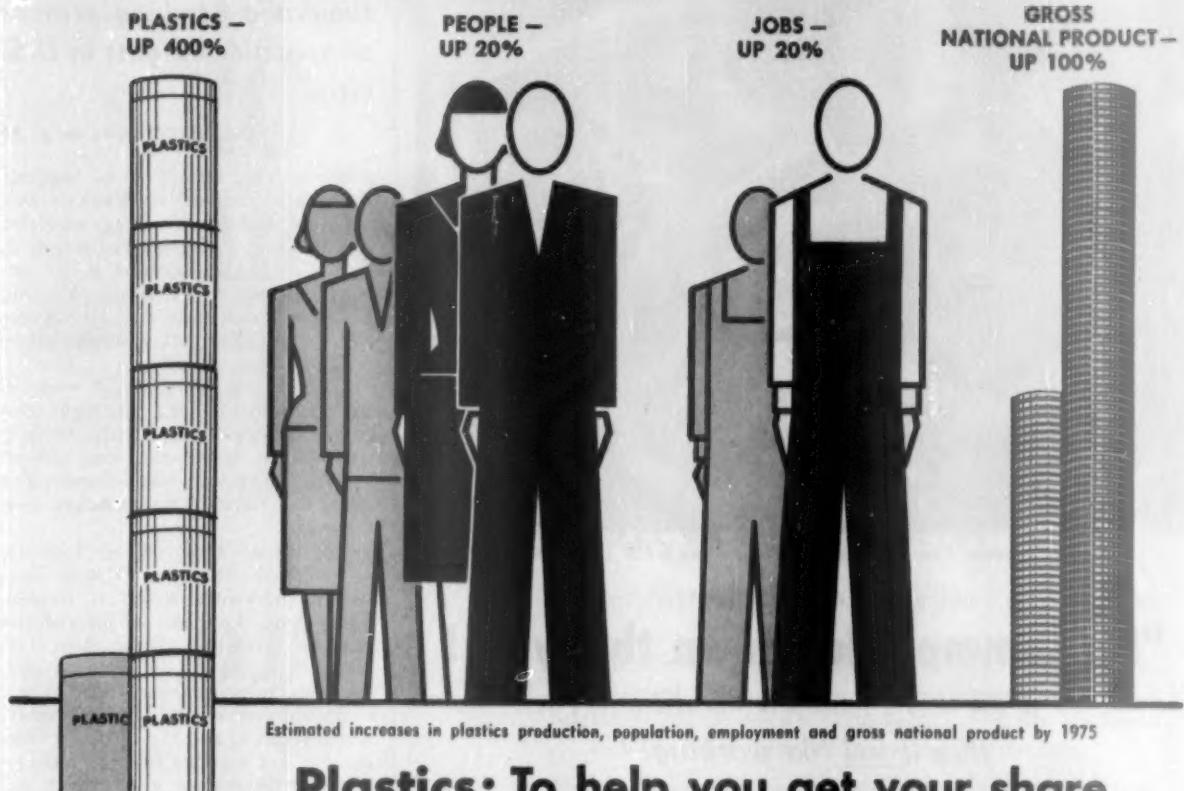
Take the day, not long ago, when Vandevanter took one of his comparatively rare flights in an airplane (pictures, page 80, 81). The flight was with one of his "lead crews," and the reason Vandevanter was going along was to find out why the crew's bombing marksmanship was off.

A lead crew—an airplane and the men who fly and service it—is one that has reached a peak of combat readiness. Its target is already picked out—Moscow, Leningrad, an industrial concentration in Siberia. The flyers in the crew know all it is possible to know about the target without having been there. They have studied maps of it, learned about the kinds of people who live there, memorized possible routes of escape in case they have to parachute in. In some cases, they've even been given intelligence reports about people living in the area who might be counted on to help them.

There is more than mere competitive pride to keep the men in a lead crew on their toes. Gen. LeMay's policy is to award the men spot promotions; they keep the promotions only as long as they turn in a consistently high performance.

• **Diagnosis**—The crew of Plane 227, with which Vandevanter flew on this

**IN THE NEXT TWO DECADES...**



### **Estimated increases in plastics production, population, employment and gross national product by 1975**

# **Plastics: To help you get your share of bigger consumer markets**

**Key to tomorrow's sales . . . product development today:** Twenty years of growth and development will put a new face on America in 1975. More consumers, *new consumers*, and new consumer wants and needs forecast a confident future for the alert, aggressive manufacturer who begins planning *now* for tomorrow's business.

In tune, there's a new research approach at Monsanto. Coordinating market information with materials studies, the service and development program will seek out an ever-broader range of *functional* uses for plastics. Results: For you, a wider choice of stronger, lighter materials, and hence the lower fabricating costs and faster, more automatic production possible with plastics. For consumers: More plastic products with new beauty, new utility, new durability.

You'll want to investigate how many leading manufacturers are already using Monsanto plastics to simplify production and cut costs while actually improving their products. And for free copy of Monsanto's report on "Application Research - For Bigger Consumer Markets," just use the handy coupon.



Electron microscope, used to study structural characteristics of plastics in Monsanto's research laboratories, magnifies 20,000 times, clarifies particles as small as .00000004 of an inch.



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 Please send me your report, "Application Research - For Bigger Consumer Markets."

Please send me information on Monsanto's plastics for \_\_\_\_\_

Name & Title \_\_\_\_\_  
(Type or Print)

— 1 —

— 1 —

AUDITORS

City, Zone, State



Model shown above: 3 ton cooling capacity. Other models 5, 7½, 10, 15, 20 tons.

## "No summer slowdown this year!"

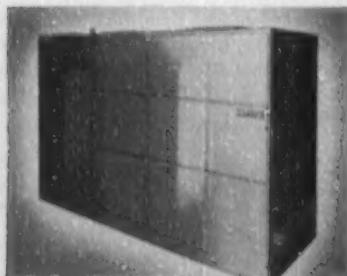
*With this Trane air conditioner,  
they'll feel like working!"*

Summer slowdown among your employees often means you're paying more NOT to have air conditioning than to have it.

Yet keeping workers productive all through hot weather may be as simple as installing a TRANE Self-Contained Air Conditioner. Here's a compact unit that cools, dehumidifies and circulates comfortable air quietly, thrifitly. It can heat and filter, too.

And you can get it ready to install for comfort and efficiency this very summer — completely TRANE-engineered, TRANE-built, to the high standards set by TRANE for modern air conditioning of giant offices, stores, factories.

Put a model of 3, 5 or 7½ ton cooling capacity in the conditioned space.



Cooling a larger area? Your best answer may well be a TRANE Self-Contained Air Conditioner like this, of 10, 15 or 20 ton cooling capacity. Evaporative condenser, optional, reduces water requirements as much as 95%.

Its cabinet is handsome, its hermetically sealed compressor trouble-free. Larger models (10, 15 or 20 ton capacity) usually go in an adjacent room, use ducts. These have the heavy-duty TRANE reciprocating compressor that automatically steps down its use of power as cooling needs are reduced.

Both units are the most modern in design for efficient operation, long life, low maintenance. Both have been thoroughly proved in use. A TRANE Self-Contained Air Conditioner is a small investment indeed for eliminating costly summer slowdown.

Whatever your needs in air conditioning, heating or ventilating, consult your architect, consulting engineer or contractor about the many advantages in using TRANE equipment. Or see your nearby TRANE Sales Office or write TRANE, La Crosse, Wis. The Trane Company, La Crosse, Wis.  
• East. Mfg. Div., Scranton, Penn.  
• Trane Co. of Canada, Ltd., Toronto • 90 U. S., 14 Canadian offices.

# TRANE

*Manufacturing engineers of  
AIR CONDITIONING, HEATING,  
ventilating and heat transfer  
equipment.*

"... it had been making simulated bombing attacks on specified targets in U.S. cities . . ."

AIR FORCE starts on p. 80

particular day, seemed to be slipping. Like other crews in Vandevanter's command, it had been making simulated bombing attacks on specified targets in U.S. cities. A mobile unit in the target city, scoring each plane's hits and misses by use of radar, had been giving Plane 227 some rather unsatisfactory grades.

Ground men had been at work on the plane since 4 a.m. The flight crew arrived at about 6, Vandevanter at 6:30. Then began the long job of checking the plane's vitals—hundreds of items that must be tested before each flight.

The plane took off at 8:30 for a simulated attack on Atlanta, Ga., with Vandevanter acting as co-pilot. Throughout the flight, he listened and watched carefully, advised here, corrected there. But he did so to no avail. The crew missed its mark once more.

Back at the base at 2:30, Vandevanter and the crews, and the squadron commander, got together for a debriefing—a look at the mission in retrospect. All the equipment, it appeared, had been functioning perfectly. The answer seemed to be that the crew needed to put in some work on its own judgment and skill.

In spite of the automatic bombsights, it takes hair-trigger responses to get a bomb off accurately from the fast-flying B-47.

• Personnel—Vandevanter changed out of his flight clothes and repaired to his desk, where he found a letter from a congressman requesting either transfer or discharge of one of the 305th's men. After that, Vandevanter put in some thought on one of SAC's biggest problems—the low rate of enlistment and re-enlistment.

One reason for the low rate is the fact that Air Force pay is low in comparison with that in private industry. SAC's maintenance operations require men who are soaked to the bone with electronic skills and knowledge—engineers and technicians of the highest order. Private industry is hungry for such men, and is willing to pay plenty for them.

Another reason for SAC's manpower problem lies in a frustrating paradox: SAC requires certain things from its men, and the men require certain things from SAC; the two sets of requirements often don't fit together.

SAC wants its men to be top-notch material—steady, responsible men who

20 Miles Up  
or  
2 Miles Down

Dependable!

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## Mercury Batteries

*Power Instruments Probing for Vital Secrets*

In their efforts to learn more about the mysteries of nature, scientists today reach far up into the stratosphere's frigid brightness and far down into the earth's oven-like blackness . . . with the aid of specialized electronic instruments.

Mallory Mercury Batteries are used to power the transmission of data from balloon-borne equipment 20 icy miles overhead and to record what goes on at the tip of a drill, two superheated miles underfoot. And they do their job dependably . . . where other types have failed.

These unique Mallory Batteries are made up of tiny mercury cells which are also used in many other kinds of instruments—tiny, transistor hearing aids . . . atomic radiation detectors . . . military communications equipment.

Whether conditions of temperature and pressure are normal or abnormal, Mallory Mercury Batteries provide constant voltage output . . . long, dependable service.

Their performance and wide acceptance are typical of the products and processes Mallory has developed in diversified research in electronics, electrochemistry and specialized metallurgy. This research is paying dividends in better performance and lower costs for manufacturers using Mallory components.

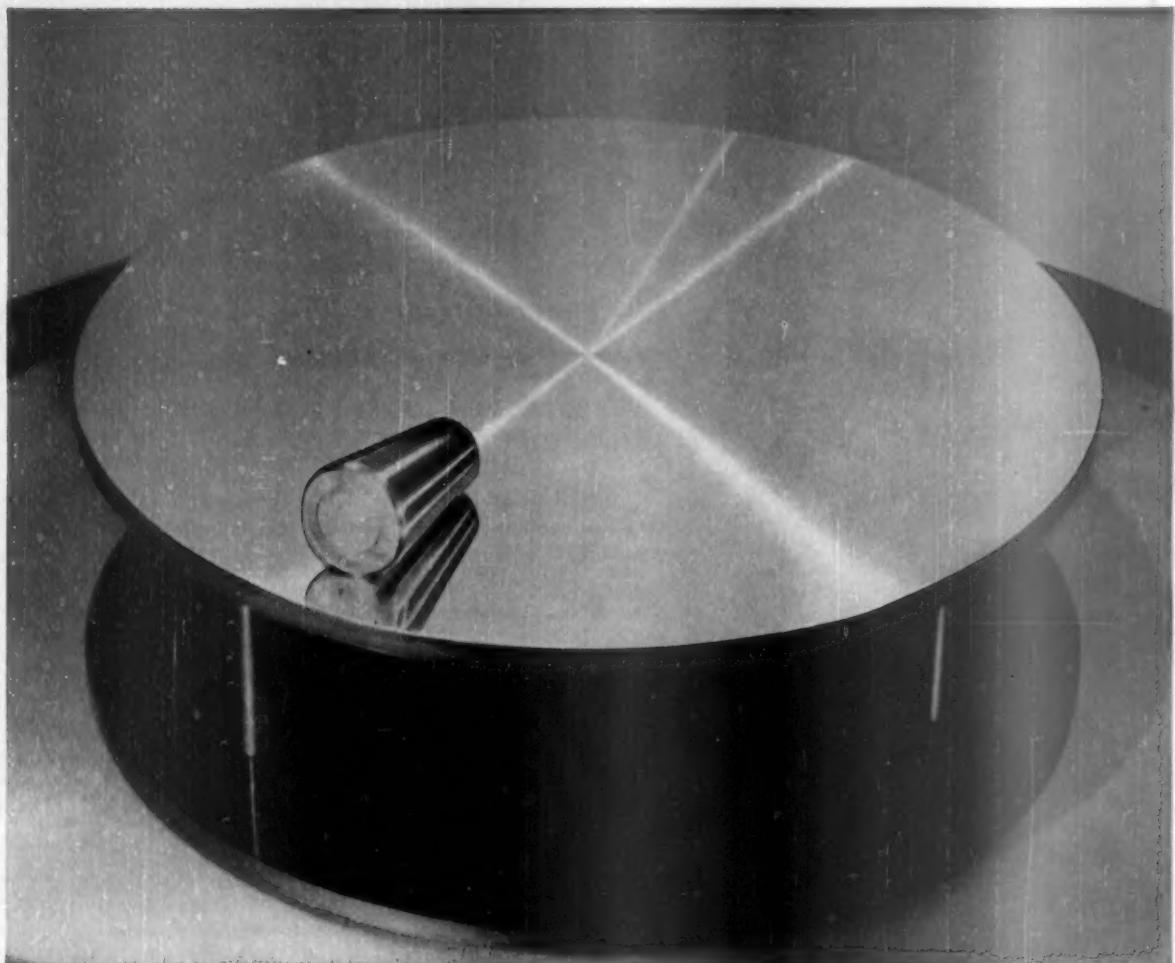
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# Only **TIMKEN**<sup>®</sup> bearings have such quality



**REASON NO. 1** On this oscillating table, a Timken bearing roller keeps rolling in a perfect circle, proving the accuracy of its taper. Such accuracy throughout is why only Timken bearings roll so true.

**Getting trains to go faster, automobiles to run more dependably, machines to produce more goods,** is one long battle against friction.

But the engineers aren't overmatched.

A properly designed tapered roller bearing, by geometrical law, gives true rolling motion and the answer to friction wherever wheels and shafts turn.

Of course, that's in theory.

To *deliver*, a tapered roller bearing has to conform in manufacture to its geometric ideal. Dimensions and surfaces have to be microscopically cor-

rect. And the bearing has to retain its geometry through years and miles of service.

It all starts with the steel.

It has to be steel with a complex personality. Tough enough to take shock loads, hard enough to shrug off wear, plenty of stamina so it won't get tired, perfect thru-and-thru.

That's general; let's get specific.

It has to be alloyed right to begin with. The exact amount of carbon, the exact amount of nickel, the exact amount of molybdenum. Each element

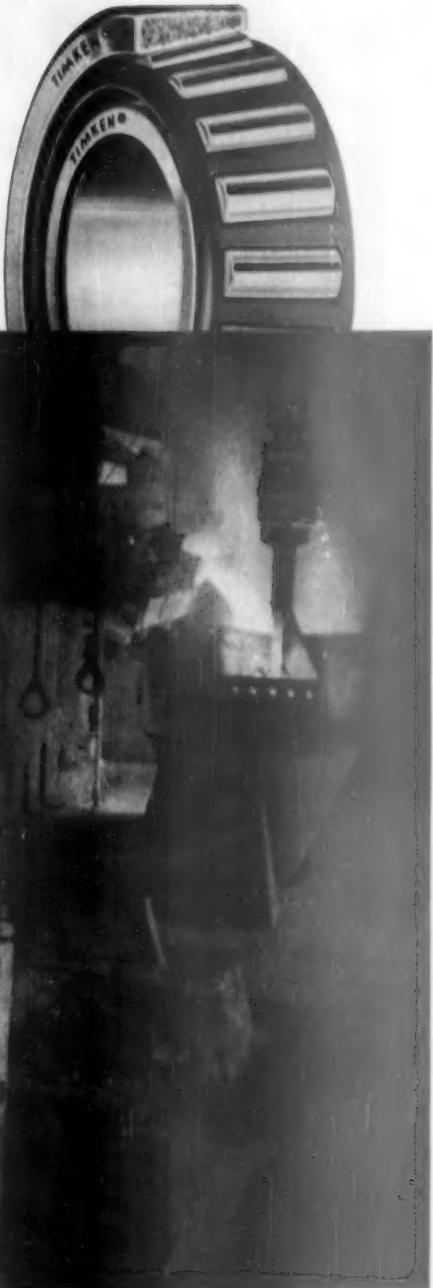
has to be within a narrow range at the split instant of pouring.

The steel has to be rolled just so, annealed just so, cooled just so. Handled with the exacting care of a medical prescription.

To get steel this good for every bearing we make, we went into the steel business. To get steel this good, we make it in the country's most modern alloy steel mill. To get it, we make it in electric furnaces only. To get it, we inspect and control the quality every step of the way.

We're the only bearing company that

s roll so true,  
thru-and-thru



**REASON NO. 2** The quality of any bearing starts with its steel. To insure quality every time, the Timken Company makes its own steel in its own mill—America's only bearing manufacturer that does.

makes its own steel. We couldn't be sure of getting Timken quality steel in any other way.

Timken bearings are designed right, made right, made of the right steel. That's why only Timken bearings roll so true, have such quality thru-and-thru.

That's why you can count on them to give miles and years of trouble-free service. With no sliding, skewing or scuffing of the rollers. With minimum friction. With little or no attention. And, in terms of performance, at lowest cost.

In any product—lathe, automobile, locomotive or lawn mower—Timken bearings are a sure sign of quality. Worth remembering when you buy a

product. Worth remembering when you build one. The Timken Roller Bearing Company, Canton 6, Ohio. Cable address: "TIMROSCO".

*Keeping America on the GO... with*

**TIMKEN®**

Tapered Roller  
Bearings

COPR. 1954 THE TIMKEN ROLLER BEARING COMPANY

# Northwest Rivers Sing a Song of New Power

Late last summer, two new hydroelectric plants began generating power in the Northwest. Both demonstrate man's skill and ingenuity in harnessing the forces of Nature, and in each case the engineering and construction were handled by Ebasco.

The Cabinet Gorge project of The Washington Water Power Company is powered by the deep, swirling waters of the Clark Fork River which roar through Cabinet Gorge. Here an arch dam was constructed 200 feet high, stretching in a graceful 600-foot arc across the canyon.

The Yale Hydroelectric Plant of the Pacific Power & Light Company is one of the largest earth-fill dams and is operated by remote control from the Merwin Hydroelectric Plant, 14 miles downstream, which was engineered and constructed by Ebasco in 1931.

Ebasco provides a wide range of construction and consulting services to business and industry all over the world. They are described in our booklet, "The Inside Story of Outside Help." May we send you a copy? Write or phone Ebasco Services Inc., Dept. C, Two Rector Street, New York 6, N. Y.



PACIFIC POWER & LIGHT COMPANY'S 100,000 kilowatt Yale Hydroelectric Development on the Lewis River in Washington.



CABINET GORGE HYDROELECTRIC DEVELOPMENT on the Clark Fork River in northern Idaho,  $\frac{1}{4}$  mile west of the Idaho-Montana border. This project of The Washington Water Power Company has a 200,000 kilowatt generating capacity.



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*Ebasco Teamwork gets things done  
anywhere in the world*

*"...after that, the man has a vested interest in the Air Force as a career..."*

AIR FORCE starts on p. 80

see their Air Force duties as jobs, not adventures. The kind of man who will fit this pattern is most often the kind of man who wants a settled, secure life for himself and his family. He can't always get it in SAC.

He can't always buy a home, as he and his wife typically want to do, but must often be content to live in whatever housing is available on his base. Moreover, he is often called away from his family for months at a time—on temporary duty at some overseas base. He worries constantly about giving his children a normal school life and his wife a normal social life. He can never be sure how long he will be able to stay at any one base.

• **Remedies**—It's not hard to see why the divorce rate among SAC people is high. Nor is it hard to see why many good men quit SAC after one four- or six-year enlistment, or shy away from it altogether.

The current tendency to cut down on such "fringe benefits" as medical services and commissary privileges—a byproduct of the economy drive—complicates the situation.

Vandevanter and his squadron commanders think one solution is to build a feeling of pride among the men. Get a hot outfit, keep it hot, and you'll be able to keep a man for his second enlistment.

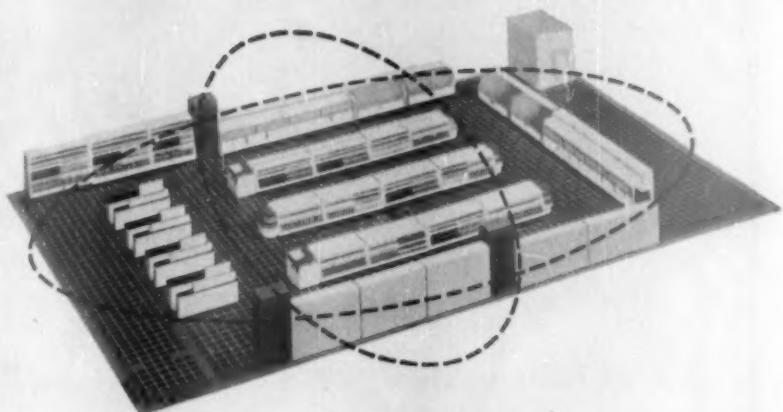
After that, Vandevanter says, the man has a vested interest in the Air Force as a career—and you generally keep him no matter what happens.

Vandevanter's wife, in turn, is working on the problem at another level. She and the other wives at MacDill have organized a dramatics club, choral club, and a nurse's aid group. These activities, the wives feel, help build up a sense of security—a sense of community life that would otherwise be lacking on an SAC base. The women at MacDill have also set up a nursery school to take care of children temporarily, and so give the mothers some time to themselves.

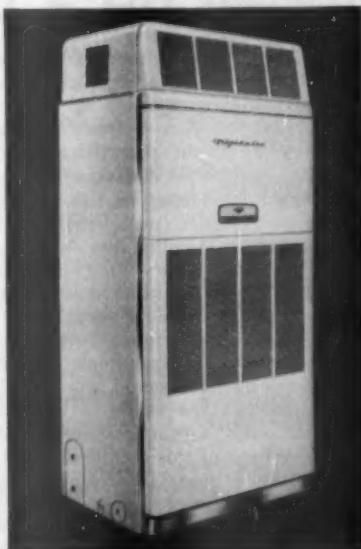
• **At Home**—After lunch and a few more duties—looking into a bad report on engine repair, checking up on the flow of repair parts—Vandevanter's time was his own. He generally tries to get in a set of tennis or a round of golf in the afternoon. Then Vandevanter goes home.

If he and his wife have no duty calls to make at squadron social events or other base parties, Vandevanter is usually in bed by 9:30.

## Frigidaire "Great Circle Cooling" gets all the comfort from every dollar's worth of air conditioning



Master-matic Frigidaire Conditioners give you out-and-around air circulation to get all the clean, crisp air all the way out into the room. None of the cool-



ing power is wasted. Banishes annoying drafts, hot and cold layers. Surrounds your employees and customers with gentle, refreshing comfort. Whisper-quiet fan and extra heavy-duty insulation minimize noise and vibration. Beautiful, streamlined exterior.

**Exclusive Multipath Cooling Unit** gives you far better heat transfer, better dehumidification . . . teams up with famous Frigidaire XD Meter-Miser for more efficient operation.

For the one best answer to air conditioning that will increase production, build store traffic and boost profits, see your Frigidaire Dealer. His name is in the Yellow Pages of your phone book. Or write: Frigidaire, Dept. 18, Dayton 1, Ohio. In Canada, Toronto 13, Ontario.

Available in a range of capacities.  
Install in multiple to cool larger areas.

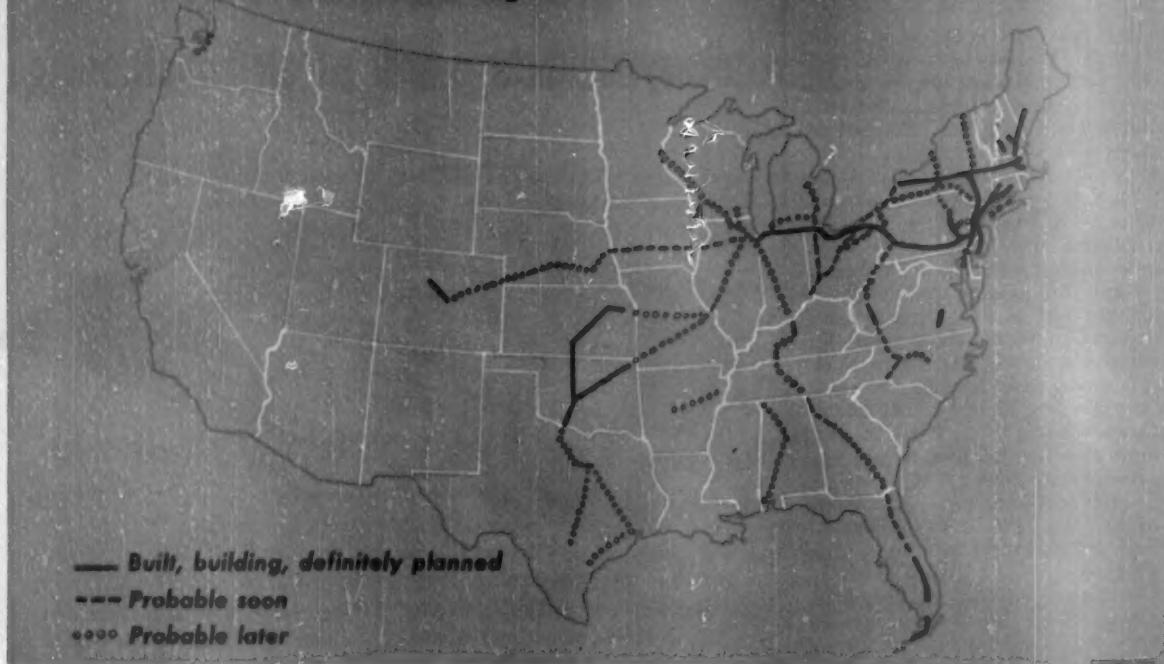
## Frigidaire Conditioners

Built and backed by General Motors



# REGIONS

## The Turnpike Potential



## Toll Roads: There'll Be a Lot More

Highway officials and engineers all around the country are beginning to realize that something they had always accepted as a truism may not be true at all.

The truism: "Toll roads can never be a solution to the nation's over-all highway problem. Total mileage of toll turnpikes will never meet more than a small fraction of the country's interstate highway needs. In most places, traffic potential isn't high enough to permit them to pay for themselves."

The new thinking: Although toll roads can't ever solve all the nation's highway problems, they will help to solve more and more of them. Over the next 20 or 25 years, mileage can grow to a big fraction of our interstate highway system. The volume of traffic is increasing all the time: Where it was inadequate to support a toll road three years ago, it's more than adequate today; in many places where it's inadequate to support a toll road today, it will be more than adequate three years hence.

• **Kansas Pike**—Take Kansas, for instance. Three years ago, the experts would have hooted at any suggestion that there was enough traffic in Kansas

to build and support a modern limited-access turnpike. And they would have been right—three years ago.

But traffic on Kansas roads has increased 24% in the past three years. Last week Coverdale & Colpitts, New York consulting engineers, reported to the Kansas Turnpike Authority that net revenues of a \$140-million, 234-mi. pike from Kansas City to Topeka to Wichita to the Oklahoma line (map, above) would cover debt service costs (interest and amortization) 1.34 times in the first year of operation. By the fifth year, the ratio would rise to 2.3 times, and the road would be able to retire its bonds within 19 years.

On the basis of this report, the Kansas authority is going ahead with plans for the road; it hopes to float its bonds sometime this summer.

• **Not Enough Taxes**—There's one simple reason why toll roads are under such pressure to keep on expanding: There just isn't enough tax money to build the free roads we need for an adequate national highway system. Total deficiencies on all roads and city streets have been estimated at \$40-billion to \$50-billion.

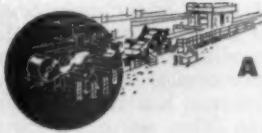
Obviously, you can't run a turnpike

along every country lane. But on the 40,000-mi. interstate highway system alone—the 1% of total mileage that carries 20% of total traffic—it would require \$12½-billion to eliminate the accumulated deficiencies.

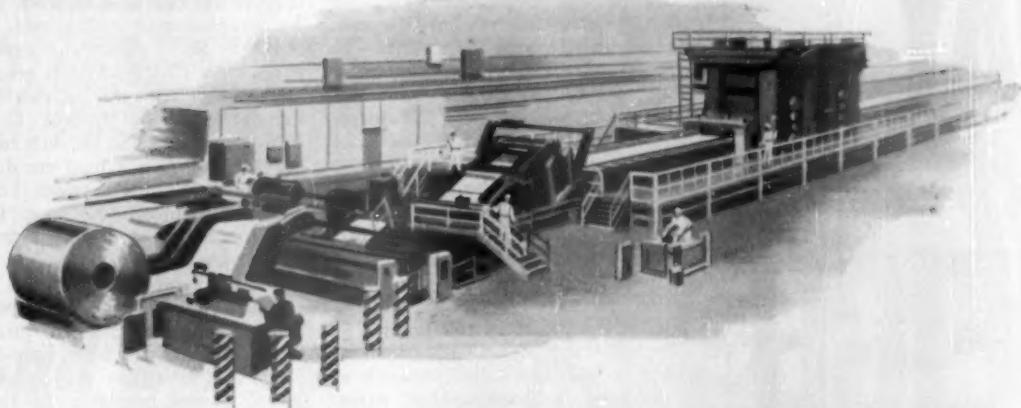
Federal and state governments have budgeted about \$1.2-billion this year for work on the federal aid highway system. Of this the primary interstate system is getting only about \$400-million—not even enough to keep abreast of wear and tear, let alone cut into a \$12½-billion backlog.

• **Toll Potential**—"Toll roads," said Charles L. Dearing, Deputy Under Secretary of Commerce for Transportation, "provide a ready way of coping with the major deficiencies in our interstate highway system."

In a recent talk, he went on to sketch the potential for toll road development. A Commerce Dept. study, he reported, finds a toll road potential—on a fully self-liquidating basis—of 8,000 to 10,000 mi. in the next 10 years. That's in addition to turnpikes now built or under construction (summary, page 98). This means, he said, that it's possible to have a 12,000-mi. network of turnpikes in service by the mid-1960s. Such a



A rolling mill that rolls on a cloud...



## ALEMITE OIL-MIST

**Pampers and protects vital bearings on this Wallingford Steel Company rolling mill with tiny, air-borne particles of oil—Saves \$480 a month in coolant alone—Far more in labor, time, maintenance and lubricant!**

When a rolling mill, such as this, squeezes steel sheets to size as readily as you squeeze toothpaste from a tube, bearings must stand a fearsome strain and pressure. Sometimes they don't stand it—run hot—and suddenly a \$3500 bearing is nothing but scrap metal.

To avoid these dangers, protect these vital and costly bearings, the Wallingford Steel Company selected Alemite Oil-Mist. And now management is walking on air! Lubrication time is cut 83%, lubricant—to a mere fraction. Life of soluble oil rolling coolant is extended, saving \$480 a month! Plus a saving of 24,000 gallons of pre-heated water, formerly used in replacing coolant.

Even more important, bearing temperatures immediately dropped as airborne particles of oil lubricated and cooled them at the same time. Product spoilage due to pitting from excess lubricant was halted. Even the housekeeping problems encountered under the old system disappeared! Overall savings are incalculable.

• • • • •

**Here's the unit that brings these savings to any machine!**

**Alemite Oil-Mist** is a completely automatic, completely enclosed system which atomizes oil into mist. Distributes it through tubes to bearings, where it is applied in a continuous, uniform film that lubricates and cools at the same time.

**Three types of bearing fittings allow the use of Oil-Mist on any bearing—any machine:**



1. Oil-Mist fittings bring the most efficient lubrication in the world to roller, ball, needle—or any anti-friction type of bearing.



2. Oil-Mist spray fittings are recommended for open and enclosed gears and chains. Allow for concentrated application where it is needed.



3. Oil-Mist condensing fittings are applied to plain bearings, slides, ways, cams, and rollers. Completely condense Oil-Mist.



- **FREE** —the complete story on Alemite Oil-Mist and how it can bring these savings to any machine. Specifications, typical installations, case histories. Use coupon below.

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1850 Diversey Parkway, Chicago 14, Illinois**

Gentlemen: Please send me complete information on Alemite Oil-Mist. No obligation, of course.

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# ALEMITE

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Brown Boveri's world-wide leadership in the design, engineering and manufacture of electrical machinery accounts for the fact that more and more industrial, utility and cooperative power plants are today investigating and specifying Brown Boveri. Why not you?

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Betatrons for Clinical & Industrial Uses  
General Voltage Regulators  
Stop Motors

**BROWN BOVERI**  
CORPORATION  
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system, costing more than \$10-billion, would carry more than 50% of all traffic on rural sections of the interstate highway system. As the map (page 94) shows, about 3,250 mi. are now built, building, or definitely scheduled. Cost totals \$3.6-billion.

Dearing and Commerce Dept. are making an obviously rosy-hued forecast. But even if Dearing's "possible" 10 years stretch to 20 there'll be more toll roads than anyone had dared predict. And recognition from Commerce Dept. is an indication of the maturity the turnpike concept has attained.

• **Planning Session**—The group before which Dearing gave his talk is in itself another indication of that maturity. It was a gathering, in Miami, of turnpike and highway officials from 18 states who got together for the first time to talk over the future of toll roads.

The meeting came up with no official finding—it had been called primarily as an informal get-together—but agreement on many points was apparent.

• **Everyone's Act**—Perhaps the most important point of agreement is on the need for greater cooperation and coordination in future turnpike planning, both among various state turnpike authorities and between turnpike and free-road agencies.

"Toll roads have developed to the point where the problems are no longer the concern of any one state," Judge Howell, chairman of the Illinois Toll Highway Commission, told the meeting.

Illinois has an active turnpike commission and hopes to start building a toll road about a year from now. But other states that are not nearly so far along saw the same need as Howell did. Tennessee, for instance, has no toll road legislation yet. W. M. Leech, a member of Tennessee's highway commission, told the meeting he is sure that no toll highway is financially feasible in Tennessee today, but he is equally sure that the state will eventually need one. "If we wait until then to do something," he said, "it will be entirely too late. We must begin planning now. From a highway viewpoint, what happens in Ohio and Florida is vitally important to us in Tennessee."

To get free-road and toll-road planners working together, some states are appointing public highway officials to turnpike authorities—sometimes in a body.

• **Pattern Set**—The group at Miami didn't have time to thrash out all the suggestions for cooperating and coordinating. So a small committee was set up to go over all the ideas and make recommendations to the states.

It's likely, though, that the final result will be loose organization of all state turnpike authorities. It might resemble the North-South Expressway

Committee that was set up a few months back by the states along a proposed Chicago-Miami toll road.

Howell and Leech are both members of this committee; so are representatives of Indiana, Kentucky, Georgia, and Florida. They agreed, at Miami, that they would continue to work together for completion of such a road.

• **Bit by Bit**—Estimates of completion dates for a Chicago-Miami pike varied widely. Five years was the shortest time mentioned; many thought 10 would be more accurate. So far, only two short segments of such a road are definitely scheduled: 40 mi. between Louisville and Elizabethtown, Ky., and 110 mi. between Miami and Fort Pierce, Fla. (map, page 94).

This piecemeal construction is typical of how the toll pikes have developed. The first of the modern turnpikes—Pennsylvania's—ran only from Harrisburg to Pittsburgh; only when that stretch proved profitable did the state go ahead with extensions, first to the east and west, now to the north. Maine's turnpike was built from the New Hampshire line only as far north as Portland; only today is it being pushed on to Augusta.

"If New Jersey had tried to include originally all the spurs they are now building or planning," one turnpike maker remarked in Miami, "they could never have got any financing to begin with."

• **Short Hauls Pay**—There's good reason why this should be so. Contrary to the popular impression, it isn't the long-distance user that pays the turnpikes' bills—it's the relatively short-haul driver.

There is far less long-distance traffic than most people think. On the New Jersey Turnpike, for instance, only 13½% of cars travel substantially the full 118-mile length of the road. The greatest volume between any single pair of interchanges on the road, New Jersey's turnpike chairman Paul Troast told the meeting, is on the 12½-mi. trip between Newark Airport and the George Washington Bridge interchange—the northern end of the pike. The second greatest number of cars travels between Newark Airport and the Lincoln Tunnel, a distance of only 8½ mi.

"It's a fundamental of traffic," said one highway engineer, "as fundamental as ABC, that anywhere, on any open highway, only a very small proportion of the vehicles are going on long trips. More than half are making trips of less than 100 mi. The great bulk are making trips of less than 200 mi." For the longest turnpikes, of course, those averages must be raised some. But it's still basic to all turnpike planning that the bread and butter comes from the short trips—the long-distance driver provides merely the marmalade.

• **Wrong Yardstick**—This is one reason

**A Big Part** of S. Morgan Smith Company's business is making big parts for their complete hydro-turbines. And they all have to go places . . . like this runner destined for a turbine on a dam site in the Great Northwest. No "boy" carries a load like this.

Western Maryland's ability to handle heavy, hulky shipments smoothly is one of many "good service" reasons why this progressive York, Penna., manufacturer of highly specialized equipment is happily located on the lines of this road.

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***send a "boy"***  
***on this errand***

When there's a man-size job to be done, you can't turn it over to a mere youngster. Do you ship heavy machinery? Then make certain the carrier has the "muscle" to swing the job.

Look at that 149,000 pound turbine runner. You can see why a load like this needs an extra strong car . . . an extra *special* car. And heavy, well-built track, as well.

It also needs bridges that can bear up under king-size loads. And bridges and tunnels big enough to give plenty of clearance. So, unless routed over a railroad like Western Maryland, an out-size shipment may have to travel "all 'round Robin Hood's barn" to reach its destination.

Ask any traffic man. He knows this. And he knows that it's a help to keep in mind the *direct* route that takes heavy traffic in its stride—



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why the original estimates of traffic on the New Jersey Turnpike were so low. When the original surveys were made, the authority was short of both time and money. So the traffic studies aimed primarily at the long-distance traffic rather than the short-haul trips, which are considerably more expensive and more difficult to measure.

When the survey showed that the long-distance traffic alone would cover the bonds, the authority didn't bother to survey any further. It just guessed at the short-haul potential. And it guessed far too low.

• **No Yardstick**—The other major reason why the original Jersey estimates were far too low stems from another fundamental of toll-road economics. Traffic on a toll road is of two types:

**Diverted** traffic is made up of cars that would have used parallel free roads within 50 mi. or so if the toll road wasn't there, but are attracted by the toll road's speed and convenience.

**Induced** traffic is made up of cars that would never have made the trip at all if the speed and convenience of the toll road had not been available.

Diverted traffic potential is fairly easy to measure: To oversimplify a bit, you merely count the cars using the free roads, sample their origins and destinations with a questionnaire, and, on the basis of your experience, estimate what percentage of them would use a toll road if it were available. (You never

ask the drivers if they would use a toll road; they're completely unreliable.)

Induced traffic potential is a complete guess, though, and the guess in New Jersey was much too low. The engineers figured induced traffic would run around 35 vehicles to each 100 of diverted traffic. In the first year, induced traffic ran 55 units to each 100 of diverted traffic, and it has since been even higher.

• **Nobody Loses**—Induced traffic is also the reason why a turnpike never hurts businesses on bypassed free roads and in bypassed towns anywhere nearly so badly as local people fear. Nowhere near all of the traffic on the turnpike is taken away from the local roads.

Besides, most of the traffic that's taken away is made up of people who are in a hurry and who probably wouldn't have stopped anyhow. At the same time, the free roads and the local streets are less congested; that makes it easier for the driver who does want to stop and buy.

A few businessmen still cry, even so, about lost prospects. W. B. Getchell, Jr., executive director of the Maine Turnpike Authority, told of one motel operator on U.S. 1, south of Portland, who continues to rail at the six-year-old Maine Turnpike. When a friend reminded him that he was still hanging out his "No vacancy" sign every night, he retorted: "Sure, but I'm not turnin' near so many away."

## What the States Are Doing About Turnpikes

**Alabama:** Bill to set up authority beaten last year in legislature; will be revived in 1955. Decatur-Birmingham-Mobile pike being talked about.

**Arkansas:** Toll road legislation vetoed last year, but advocates still trying. Highway Commission seeking national engineering firm to study feasibility of Little Rock-Memphis pike.

**California:** Several toll road bills rejected by 1953 legislature; will probably be reintroduced in 1955; little chance of passage.

**Colorado:** Denver-Boulder 17-mi. pike opened in 1952. Legislature this year empowered Highway Commission to plan and administer toll roads and negotiate interstate toll road compacts. Nebraska connection possible eventually. Toll tunnel through Rocky Mountains being studied.

**Connecticut:** Merritt and Wilbur Cross Parkways from Greenwich to Massachusetts line above Hartford in operation; \$400-million pike from Greenwich to Rhode Island authorized.

**Delaware:** Pike from Delaware Memorial Bridge to Maryland line turned down by legislature last year; will be reintroduced next year; will probably pass eventually.

**Florida:** Toll highway along Keys in operation. Digging to start this summer on Miami-Fort Pierce pike. Legislature expected to O.K. northward extension to Georgia line next year.

**Georgia:** Legislature last year set up authority to build north-south pike when financially feasible. Atlanta-Chattanooga probably first link.

**Illinois:** Toll Roads Commission studying several possible routes—Chicago-Rock Island, Chicago-St. Louis, Chicago-Wisconsin near Milwaukee, Chicago-Wisconsin near Beloit. Hopes to decide in time to start digging next spring.

**Indiana:** East-west pike from Chicago to Ohio line all set to go. Toll Road Commission making preliminary study of Chicago-Louisville turnpike.

**Iowa:** No toll road legislation, but Highway Commission has hired outside engineers to make feasibility study of Davenport-Des Moines-Council Bluffs pike.

**Kansas:** Engineers reported last week that Kansas City-Topeka-Wichita-Oklahoma pike is feasible; Turnpike Authority going ahead.

**Kentucky:** Highway Dept. has unrestricted authority to build toll roads;

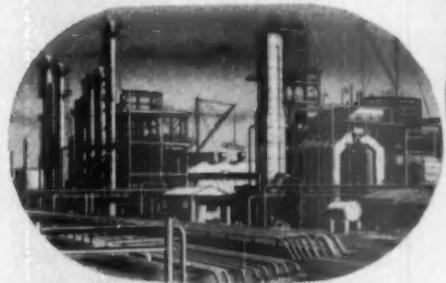
## **OPERATING COSTS... AND PLANT LOCATION**

The ability of a company to make and maintain cost reduction is especially significant now that vigorous competition and a buyers' market are back.

Shrewd selections of plant locations that take advantage of new developments, available manpower, transportation, low-cost power and material handling, can well mean the difference in a healthy profit or a ruinous loss.

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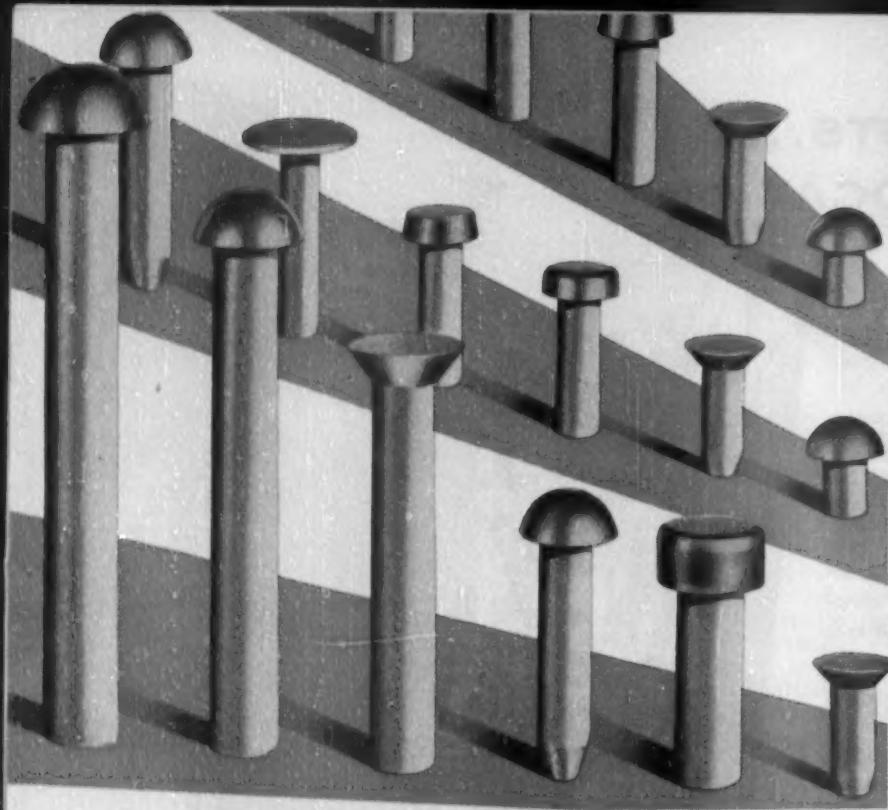


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## Here's Why Townsend Cold-formed Rivets Drive Easier, Fit Tighter

The ease of driving and tight fit you get with Townsend cold-formed rivets stem from their close size and shape tolerances. Since they are perfectly round, holes can be made smaller for tighter fit—joints seal readily. The shank end is cut off squarely and fits the contour of the driving head evenly. Also, there is less flash under the head than on hot-formed rivets which allows closer fit.

For operations where rivets are to be heated electrically, the square-cut end plus the absence of insulating scale provide better contact and eliminate arcing. For cold-pressing operations, Townsend rivets are supplied in an annealed or normalized state which gives them a uniformly fine grain size and temper—assures ease of setting.

In the construction, shipbuilding, railroad and heavy fabricating industries Townsend rivets, large and small, have been standard for more than a century. In fact, Townsend supplies a wide range of fasteners to every industry that needs to assemble materials quickly, economically, permanently.

As the world's largest manufacturer of a complete line of rivets, Townsend also regularly produces more than ten-thousand standard and special fasteners—makes as many as 60-million pieces daily. This combination of experience, product range and tremendous capacity gives you a dependable source of supply for the correct cold-formed products for each specific use—saves time and money in your operations.

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Louisville-Elizabethtown pike now under way. Eventual extension likely to Tennessee line, probably near Nashville.

**Maine:** Turnpike from New Hampshire line to Portland completed in 1947. Extension to Augusta now being built.

**Maryland:** All toll road legislation has failed so far. Pike from Chesapeake Bay Bridge to Delaware state line has been discussed.

**Massachusetts:** Turnpike Authority has power only to build east-west road from Boston to New York State line near Stockbridge; this project now under way.

**Michigan:** Turnpike Authority limited to three routes from Detroit—to Bay City, to the Indiana line near Chicago, and to the Ohio line near Toledo. It is studying all three.

**Missouri:** Proposed law to set up separate toll road authority beaten last year. New bill authorizing Highway Commission to build toll roads thought likely to pass next year.

**Nebraska:** Authority set up last year with unlimited power to build any pike found financially sound. Not even discussion of possible route yet, but observers see road from Omaha to Lincoln and then toward Denver as most logical.

**New Hampshire:** Shoreline pike from Massachusetts to Maine completed 1950. Portsmouth-Rochester extension now under way; also new Nashua-Connard pike.

**New Jersey:** Turnpike from New York City area to Delaware River below Wilmington completed 1952; connections with New York Thruway and Pennsylvania Turnpike planned; extension west to Delaware Water Gap under discussion. Garden State Parkway from New York City area to Cape May being built.

**New York:** New York City-Schenectady-Buffalo Thruway under construction; connections with Massachusetts, New Jersey planned, with Pennsylvania under discussion. Four new pikes, costing over \$1-billion, suggested by Gov. Dewey.

**North Carolina:** Has had Turnpike Authority since 1941. Mt. Airy-Gaston-Castaña-Charlotte pike likely first, with Castana-Raleigh extension later.

**Ohio:** East-west pike now being built. Cincinnati-Conneaut pike with Springfield-Toledo spur under study; Mansfield-Youngstown spur also possible.

**Oklahoma:** Tulsa-Oklahoma City pike finished last year; extensions toward Joplin, Mo., Wichita, Kan., and Wichita Falls, Tex., authorized and being surveyed.

**Pennsylvania:** Pittsburgh-Harrisburg road first modern turnpike; extensions to Philadelphia and Ohio line now

complete; connections with New Jersey and extension to Scranton now under way; several others in planning stage.

**Rhode Island:** Bill introduced in current legislature thought to have little chance of passage.

**Tennessee:** No legislation, but Highway Commission keeping in close touch with neighboring states. Passage of law likely next year.

**Texas:** Turnpike Authority studying Dallas-Ft. Worth pike. Private companies hold charters for Dallas-San Antonio and Dallas-Houston-Corpus Christi, with construction uncertain. Connection with Oklahoma possible some day.

**Virginia:** Two separate authorities for two pikes. Richmond-Petersburg will probably be built first; West Virginia-North Carolina link to come later.

**Washington:** Toll Bridge Authority has legislative O.K. to build Tacoma-Seattle-Everett pike if financially sound.

**West Virginia:** Charleston-Princeton pike to open this summer. Northward extension possible later.

**Wisconsin:** Turnpike Commission set up last year to consider pike from Illinois line to Minnesota line. Road from Milwaukee south toward Chicago also discussed.

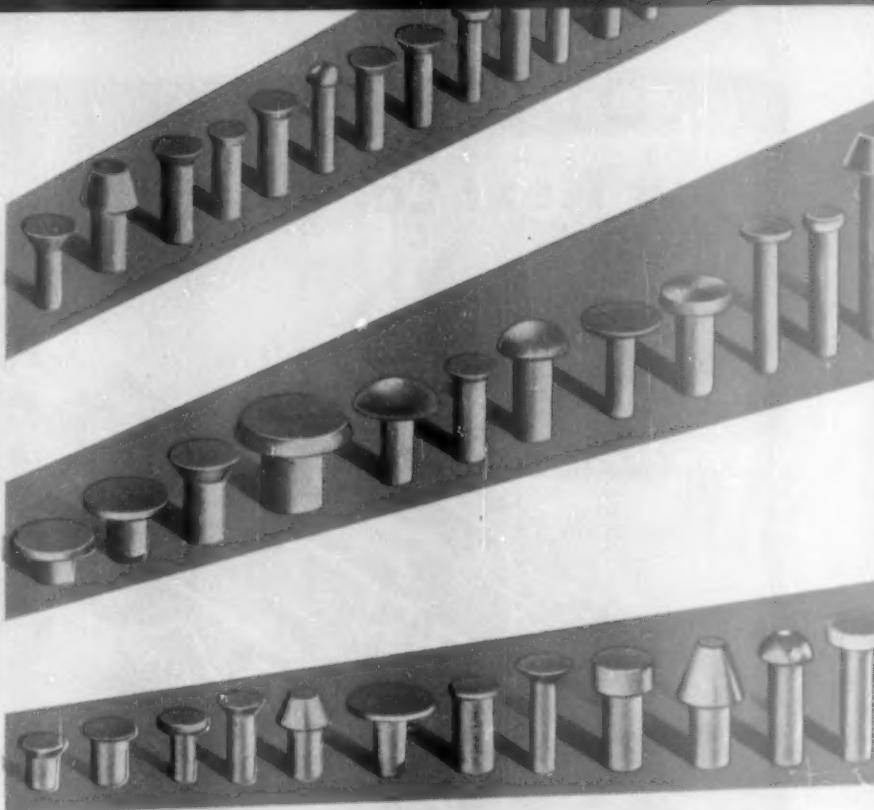
#### REGIONS BRIEFS



With the arrival of the Isbrandtsen ship Flying Enterprise II last week (picture), New Haven, Conn., inaugurated regular transatlantic general cargo service for the first time in 75 years. Isbrandtsen plans to serve the port once a month from now on.

Some 26 manufacturers in Denver and Colorado Springs have jointly formed Denver Industries, Inc., to bid for prime defense contracts, which it will then subcontract to them. The founders insist that neither they nor Colorado as a whole have been getting their fair share of defense contracts.

Missouri's Supreme Court has upheld St. Louis' right to issue \$500,000 of bonds for off-street parking facilities. The court also said the city has the right to operate the parking facilities if no acceptable bids are received.



## How To Plug Holes In Cost And Design Problems With Townsend Rivets

Economy in production-line assembly of components and simplicity of product design are only two advantages you enjoy when you use Townsend cold-formed rivets. In addition to their low initial cost, they improve your product by making possible tightly sealed joints of great strength and high resistance to vibration.

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either in packages or in bulk. This means that you no longer need order rivets by the pound and convert the weight into pieces—purchasing and inventory control is simplified. Then too, Townsend distributors and jobbers receive their stocks in standard cases which contain individual boxes packed by actual count. This enables them to give you faster and more efficient service.

To keep costs down and quality up, specify Townsend rivets and special fasteners. We have the capacity to pace your production schedules — you can depend upon us to help keep your assembly lines rolling.

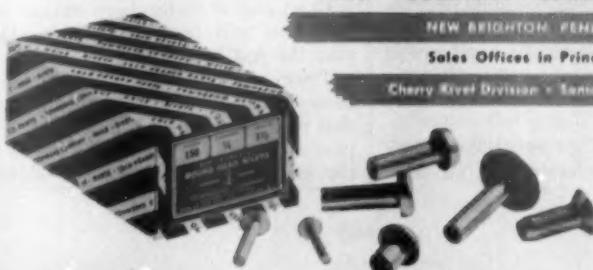
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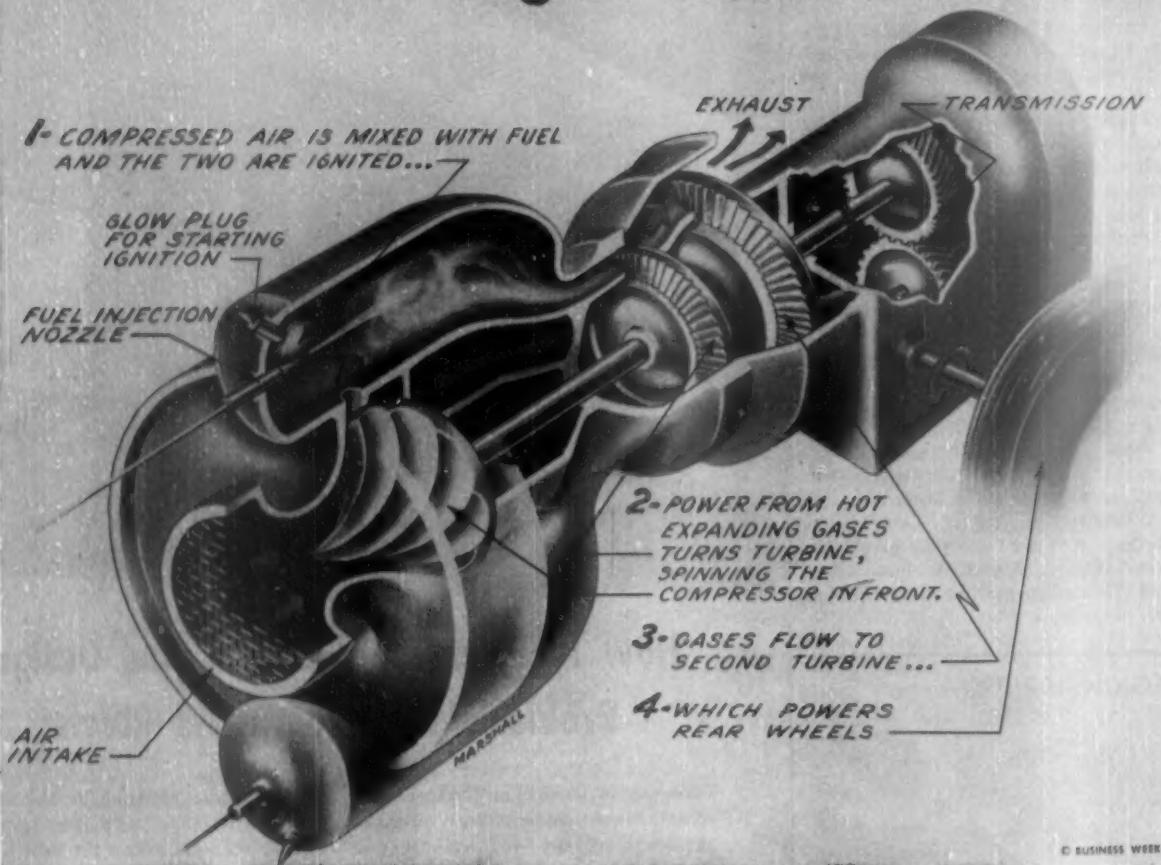
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# PRODUCTION

## Your Next Car Engine Works like a Jet



© BUSINESS WEEK

## Taming Jet Power for the Road

Gas turbine engines like the one illustrated above will at a not too distant date come down out of the sky to power land-hugging vehicles—though at a safer pace than the sonic speeds at which they now push jet aircraft through the heavens. That's what the future promises for the gas turbine in the automotive industry.

One significant indication of that was the prediction this week by Robert Cass, an official of White Motor Co., Cleveland, and the past president of the Society of Automotive Engineers, that gas turbines will be used in trucks within the next five years. According to the American Automobile, a McGraw-Hill publication, he says at first they will be used as auxiliary engines for short, big bursts of power on steep hills.

Then they will go into full-time use as they gain in efficiency. One other

use in the offing for heavy vehicles: A big passenger bus could make a turbine pay off on long, nonstop trips via superhighway.

Actually, you can go further than Cass did. After the turbine proves itself in industrial uses, the passenger car makers are sure to give it a whirl—though that won't happen overnight. A turbine-powered car could offer a few sales extras such as better all-weather operation, lower maintenance costs. At present the big handicap is the turbine's greed for fuel. The first manufacturer to bring out a turbine-powered car with an engine that's cheap in cost and operation will have a big advantage over the rest of the field.

• **Power**—In aircraft, a turbine's power comes from the hot, expanding gases that rush out of the tail pipe of the engine as a kind of exhaust. The rush of the gases pushes the airplane along—

on the same principle that makes a gun kick when it's fired. Automotive engineers have developed the turbine's construction so that the force of the gases is converted into rotary motion, which turns a gear transmission and finally the vehicle's wheels.

• **Test Runs**—Today, nearly every vehicle manufacturer is in some way working on the engineering and development of turbines for its products. Right now a few have a good head start, a jump on the rest of the pack that will bring turbine-powered trucks and cars closer to the actual market:

• One of the major truck makers is already deep in experiments with turbines. Using a 40-ton truck it is reported to be getting performance equal to the latest passenger cars.

• General Motors Corp. has been giving the engine a tryout in a regular-sized bus. Jammed with all kinds of



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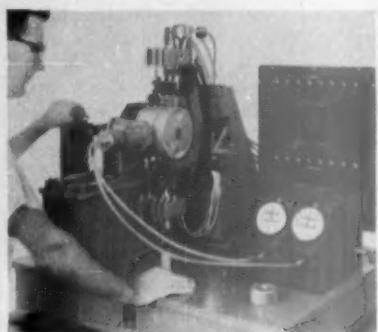
There is an alternative, as many firms now know. They're the ones who have investigated the complete line of modern Federal gages. They've found that it includes dial-indicating, air, electric and electronic types. They've seen some that cost as much

as \$00,000.00; others that run as little as \$00.00. They've been impressed by low-cost Federal dial-indicating gages that cut inspection time in halves, because operators see dimensions and limits instead of feeling them. So, they've concluded that Federal, with its broad line, is best qualified to give an unbiased recommendation of the right-priced gage for any job.

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**Triple Check for Accuracy!** Here, a turret lathe operator uses a Federal Indicator Snap Gage, a Hole Gage and a Dial Indicator Travel Stop Gage to supply data for statistical quality control chart in background.



**Ten Dimensions Checked at Once!** They're hard-to-measure dimensions on an aircraft engine piston. But a Federal Air-Electric Gage makes the job easy. Panel lights show when and which dimensions are over or under size. Two Dimensionair Dials in right foreground indicate size condition of each end of piston pin hole.



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# LOUISIANA



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Those who are earnestly trying to find the key to the rise of the South as an industrial power will have to look in other directions than legislation. There is the natural advantage of the South in raw materials—petroleum, salt, wood, natural gas, to name a few. The South has room for industry. It has industrial sites with access to transportation—rail, air sea, motor—and there's plenty of working and living room for plants and employees alike, and the labor supply is good. Adaptable and intelligent, the South's labor pool is considered one of the most efficient in the nation.

The record of the South is ample proof that the South has progressed. Its per capita income, disposable income and standard of living has risen accordingly.

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instruments, the bus is really a four-wheeled laboratory. More eye-catching but less practical is GMC's experimental car, XP-21 Firebird—a sleek, Buck Rogers-like affair that's powered by a 370-hp. Whirlfire turbine, and rated at a speed about 175 mph. (BW-Jan. 16 '54, p30).

Chrysler Corp. announced officially, this week, that it is powering a 1954 Plymouth Belvedere with a gas turbine engine. This came as no great surprise in Detroit, for it has been known for several weeks that Chrysler had been experimenting with a turbine engine on its 4,000-acre proving ground. The wallop in Chrysler's announcement came when the company said that it had pushed fuel economy up to that of conventional automobiles.

Like other gas turbine engines that have shown up in Detroit, Chrysler's is lighter, with fewer moving parts than a comparable piston engine. According to George J. Huebner, Jr., who heads gas turbine research at Chrysler, it is almost 200 lb. lighter than a piston engine of similar power—160 hp. Also, it has a fifth as many moving parts, needs no radiator or liquid cooling system, and only one spark plug—which you use only on starting.

• **Driving It**—Come the day of turbo-powered cars, you won't notice much difference in the way you'll drive your favorite model. Engineers will make sure that you won't have to change your driving habits too much. Behind the wheel, you'll get the feeling of the turbine's power, but be able to pour on the coal slowly and smoothly.

• **Designers' Field Day**—The big innovation in the finished cars of the future will be in the way they'll look from the outside. For the same power, a gas turbine is smaller than a piston engine, a more compact package that has fewer extra accessories. Because it doesn't need a cooling system with its bulky radiator, or a complicated ignition system, the turbine will be a natural for mounting in the back of a car. You can expect the designers to pounce on it as the basis for a truly streamlined body.

• **Turning the Wheels**—The automotive engineers, however, have had to add a kind of converter on the tail end of the jet engine in order to adapt it to cars. The hot gases go through a second turbine wheel that has no mechanical connection with the first one. It turns a set of reduction gears engineered for cutting down the turbine's speed to a level that's better adapted for driving the car wheels. To get variable speeds for driving, GM's Firebird uses a regular manual shift for low, driving, and reverse gears. In a stock car, though, the transmission could be engineered for automatic operation.

The power of the Firebird's engine

is too high for an ordinary stock car, but the power and weight together make a package that's competitive with the piston engine.

The Firebird engine has a peak power of 370 hp., and weighs about 775 lb. That gives a power package with a weight-to-power ratio of about 2 lb. per hp.—about one-half the ratio for the engine of a conventional passenger car and its driving mechanism, and one-third that of a truck.

• **That Fuel Appetite**—Gluttony for fuel is the one big drawback of turbine engines in cars. A turbine burns fuel economically under a continuous steady load. But cars and trucks don't run that way. Their engines run for a good part of their operation at an idling speed; and the cost of the fuel they burn then is hardly worth adding up. But that's where a turbine engine gets into trouble.

At a standstill, it doesn't slow down very much; the fuel consumption isn't cut when it's idling. General Motors' Whirlfire has a speed of 26,000 rpm. at full tilt, but even when it's idling the engine must turn over at 8,000 rpm. to keep going at all. So the fuel bill at a standstill is roughly 30% or more of the cost at full load.

Chrysler's engine is the first step that anyone has taken toward making a turbine competitive with piston engines on fuel.

The company says that it curbs its turbine's appetite with a new heat exchanger, which uses most of the heat that is discharged as waste by conventional gas turbines. Instead, Chrysler transfers this heat back to the incoming flow of fresh air, uses it to drive the wheels of the car.

• **Economy**—Heat exchangers are one device that engine makers have been trying out to improve fuel economy. The trick has been to find one that would transfer tremendous quantities of heat at very high efficiencies, yet not to be too large to fit under the car's hood. Chrysler says it has this problem licked, points out that it selected the Plymouth as the experimental model to show that such a turbine-and-regenerator system could be designed to fit inside the engine compartment of a small car.

But size and efficiency are not the only problems that have to be solved before you will be out on the road in a jet.

One other problem shows up when you look at the raw materials that go into a turbine engine: nickel, cobalt, tungsten, molybdenum, chromium. Each is scarce. Chrysler, for one, is quick to point out that it may be easy to turn out a few models on an experimental basis, but that mass production is likely to be difficult because of this raw material scarcity.



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through dialing!

The XY Switch is the heart of a system so intricate in design that its blueprints alone are weeks in preparation. Yet it is so self-sufficient and dependable that telephone companies keep XY-dial exchanges running day and night without a single human attendant.

People design and build the XY system—the people of Stromberg-Carlson, whose engineering ingenuity also produces the finest radios, radio-phonographs, television, sound and intercommunication equipment, electronic carillons and many "miracle" products for our armed forces.

There is nothing finer than a

**Stromberg-Carlson®**

Rochester 3, New York



"Panoramic Vision"  
Television  
Receivers



High Fidelity  
Radios and  
Radio-Phonographs



Sound and  
Public Address  
Systems



Office  
Intercom  
Equipment

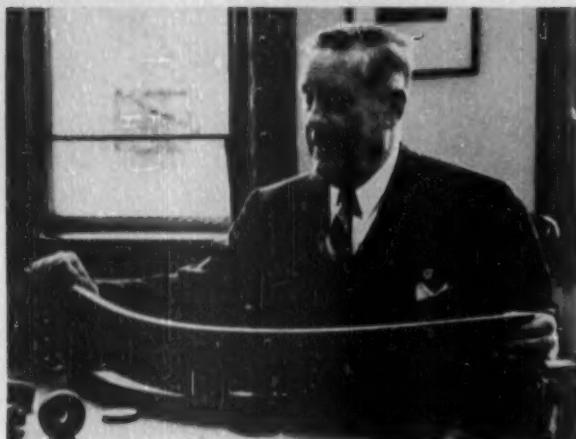


Electronic Carillons  
for Churches and  
Public Buildings

AND MANY OTHER ELECTRONIC PRODUCTS FOR THE ARMED FORCES



R/M's Rohrbach found transmission parts met threat to asbestos friction materials . . .



. . . and industrial rubber items gave know-how for molded plastics. It's his way of . . .

## Getting There First with New Lines

John F. D. Rohrbach (cover), president of Raybestos-Manhattan, Inc., is demonstrating in the pictures above his answer to this question: How does a recognized leader in a field keep from becoming complacent and losing the top spot to the competition?

Rohrbach's answer, as the pictures show, is this: "You've got to develop new products without a letup—even if they compete with what you're already making."

In a nutshell, that's the guts of any progressive outfit. Sometimes it may even amount to putting yourself out of business in a particular line before the competition has a chance to do it for you.

Obviously, no single product can hold its lead indefinitely. It's almost a rule of thumb that the more successful the product, the harder the competition will try to improve on it or to develop a new technique to get around

it. To Rohrbach, the answer is: Do it yourself—first.

That's just what Raybestos-Manhattan has been aiming at for more than a generation. It's what has made the company a recognized leader in a dozen fields, including friction materials, asbestos textiles, a wide variety of industrial rubber products. If you tally up separately all the many sizes in various lines, the company makes about 25,000 different products.

• Next!—The company's latest item, now approaching commercial production, embodies a new concept in power transmission. It's called the Poly-V-Belt and it's one of those extremely simple ideas that makes you wonder why it wasn't thought of before.

The Poly-V-Belt combines the simplicity of a flat belt with the gripping power of the V's. It does this by molding lengthwise V-shaped corrugations on the inner side of a flat belt, so that

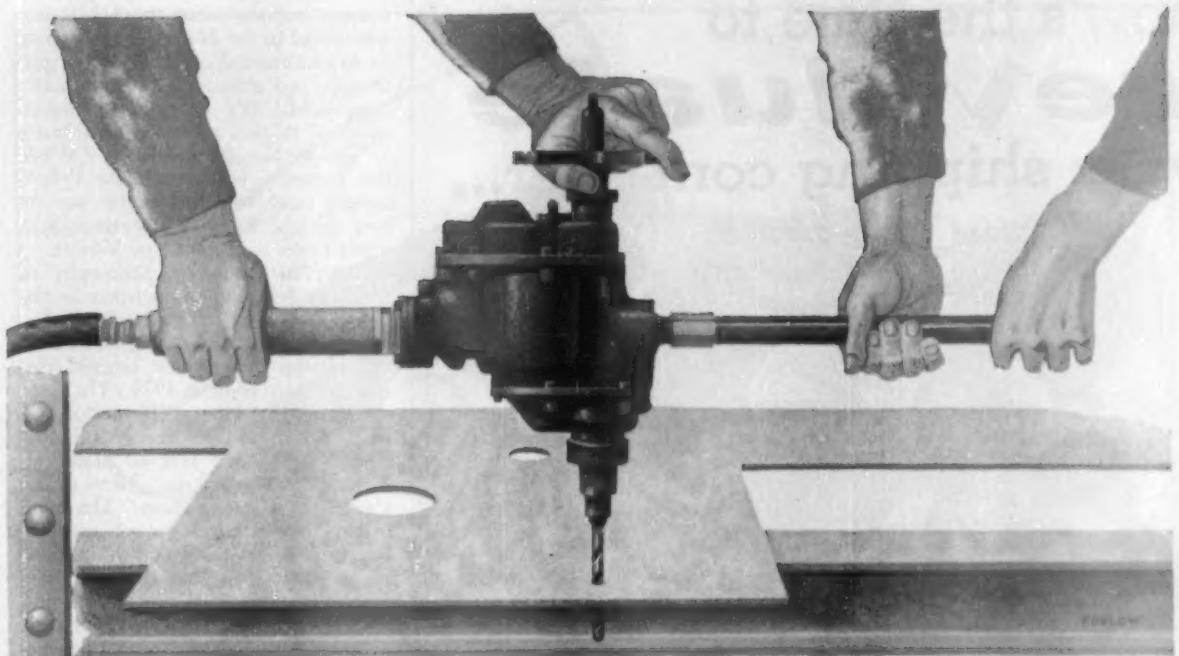
you have, in effect, a number of parallel Vs joined into a single belt. Here's what you get:

- Horsepower can be stepped up a third over that of separate V-belts occupying the same space; or you can cut down on space if you want the same horsepower.

- The difficult job of trying to match sets of separate V-belts is eliminated. The trouble has been that one belt may not "give" quite so much as the others, thus will carry more weight, perhaps break more quickly.

- The belt lasts longer. That's because (1) the flat belt that joins the Vs together provides continuous strength across the full width of the sheave, and (2) the Vs fit the sheave right down to the point of the V instead of being truncated part way down as at present, thus distributing face pressure over a much wider area.

All this adds up to something like



## Need high capacity, long service life, small size?

Here's how leading manufacturers of pneumatic tools  
get them with **NEEDLE BEARINGS**

Torrington Needle Bearings are used in many leading brands of pneumatic tools because of their ability to take heavy loading, their compactness, and their long life.

In wrenches, nut runners, drills, rivet hammers, impact and many other types of air-driven tools, the Needle Bearing's ability to boost power output and torque, while saving weight and space, has been proved again and again.

On spindles, idler gears, planetary gears and angle attachments, Needle Bearings enable tool designers to keep tools compact and light. They

cost little more than plain bearings, yet they give high-capacity performance over long periods with minimum maintenance.

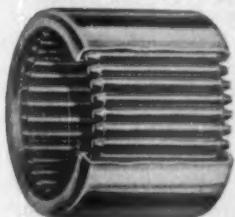
Throughout industry, Torrington Needle Bearings have become "standard equipment" since their introduction nearly twenty years ago. When space is limited and high capacity is a "must," specify Needle Bearings.

Why not learn whether the Needle Bearing can benefit your products. Our engineers will be glad to assist you.

THE TORRINGTON COMPANY  
Torrington, Conn. • South Bend 21, Ind.

### **TORRINGTON NEEDLE BEARINGS**

Needle • Spherical Roller • Cylindrical Roller • Tapered Roller • Ball • Needle Rollers



*Trade-marks of leading pneumatic tool manufacturers whose products enjoy the benefits of Needle Bearings.*

**Ingensoll-Rand**



**Buckeye Tools**  
CORPORATION  
DIVISION 30 • DAYTON 1, OHIO



**Theo's**

**NATIONAL AIR SANDER**  
**NS**

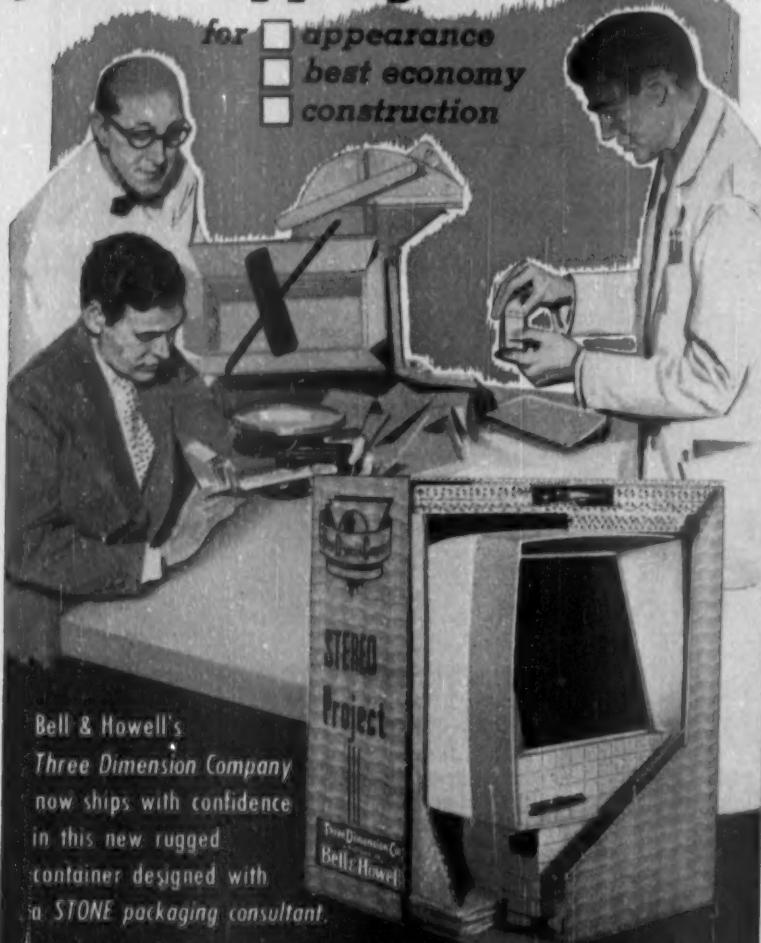
**FLEET AIR TOOLS**  
**Roto-Tool**

**Porter Cable**  
Quality Electric Tools  
**ARO**

**K**  
KELLEN TOOLS

# now's the time to *revaluate* your shipping container...

for  appearance  
 best economy  
 construction



Bell & Howell's  
*Three Dimension Company*  
 now ships with confidence  
 in this new, rugged  
 container designed with  
 a STONE packaging consultant.

✓ For appearance, and to re-emphasize the Three Dimension Company's merchandising theme, this brand new carton was designed by STONE with a three dimensional motif in MULTI-TONE . . . an exclusive STONE process that adds full color and tone to corrugated containers. ✓ For construction, a special contour inner packing was developed by STONE to eliminate costly shipping difficulties. Write or call today for a container evaluation check list.

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General Offices: Dept. B-3 • 4200 W. 42nd Pl. • Chicago 32,  
 OTHER PLANTS AND MILLS: Chicago, Ill.; Philadelphia, Pa.; Franklin, Ohio;  
 Coshocton, Ohio; Pittsburgh, Pa.; Mansfield, Ohio; Mobile, Ala.

Sales Offices: New York; Philadelphia; Pittsburgh; Allentown, Pa.; Lancaster, Pa.;  
 Baltimore; Wilmington, Del.; Akron; Cleveland; Columbus; Toledo; Lima, Ohio;  
 Mansfield, Ohio; Sebring, Ohio; Kenosha; Chicago; Joliet; Grand Rapids.

the biggest advance in the power transmission business since the V-belt was introduced in the 1920s. It's not going to revolutionize the industry overnight, though, and nobody knows this better than R/M. It's a long-range project, designed to pick up speed as ordinary V-belts decline in popularity. While the company is pushing the Poly-V among machinery makers for use on new models, R/M will continue as a major factor in present-type V-belts.

• **Many in One**—The philosophy of trying to beat the competition to the punch runs all through Raybestos-Manhattan. It probably goes back to the unusual merger that brought this company into being in 1929. The three companies that merged (Raybestos Co., U.S. Asbestos Co., and Manhattan Rubber Mfg. Co.) were all successful, medium-sized companies. There wasn't a weak sister among them. The main reason they decided to get together was this: They did so much business among themselves that they felt they could all benefit from coordinated purchasing, engineering, research, and sales.

Over the years, these mutual benefits have been many; but at the same time, the separate divisions have been allowed to develop their own personalities. Specific problems in the various divisions are channeled through corporation committees. Say there's a bug in working out a new plastic. The development engineers can call on experts in other divisions who may have run up against something similar in handling other materials. But after the product has been developed, it may very well compete in some markets with the output of the same divisions that aided in its development.

• **Men**—The man behind the merger and the one largely responsible for the company's emphasis on product development, was R/M's late Chairman of the Board, Sumner Simpson, who had been president of Raybestos Co. Rohrbach, who succeeded Simpson as president in 1948, had been associated with Raybestos since 1916 through the accounting firm of J. Lee Nicholson.

Rohrbach had acted as auditor, systematizer, cost expert, and tax consultant from the time when Raybestos was worth \$50,000, and his connection with the company gradually grew closer. He was active in the acquisition of General Asbestos & Rubber Co. and the establishment of a Canadian subsidiary in 1921. He played a part in the merger that created Raybestos-Manhattan, Inc. in 1929, and in 1938 went with the company full time.

• **Scope**—The company that Rohrbach runs today has four main plants along the East Coast from Bridgeport, Conn. down to North Charleston, S. C. Two new ones have been opened within the last two years at Neenah, Wis. and



Dick Tracy courtesy Chester Gould and Chicago Tribune Syndicate, Inc.

*CHESTER GOULD  
© CHICAGO TRIBUNE - N.Y. NEWS SYND.*

## Who lends an ear to electronics?

### Read about the part banks play in the progress made by the electronics industry

Remember a few years back?

Even if you were among the most visionary of Dick Tracy's fans you were probably quick to concede that a "two-way wrist radio" was far too fantastic for anything but the comic strips.

Meanwhile the electronics detectives were at work.

In a single generation wrist-size radio receivers became instruments for national defense. Electronic brain calculating machines, radar, transistors, color TV and scores of other unimagined miracles came out of the electronics industry's laboratories.

They're still coming, and American Banks have something to do with practically every one. Here's how.

#### Electronics and money

Creating and mass-producing electronic

marvels costs millions of dollars a year. To get this money the electronics industry relies mainly on investors and its own profits. But rarely are these two sources able to foot the whole bill alone, and it remains for commercial banks to step in. This they do with short-term loans.

#### Loans—loans—loans

Bank loans contribute to practically every phase of electronics development, production and distribution. Bank loans help manufacturers buy up raw materials, help finance the conversion process and help finance the sale of the finished products. Bank loans stay with electronics right on through to the retail distribution stage and frequently help dealers stock shelves with everything from infrared broilers to "hi-fi" tweeters.\*

Such loans to the electronics industry

...and every other major industry, are the commercial banker's number one job. It's his responsibility to put money to work in such a way as to benefit the community and its business, and return a profit to investors.

#### How you're affected

The impact of these loans is felt by just about every man, woman and child in the country because of this simple truism:

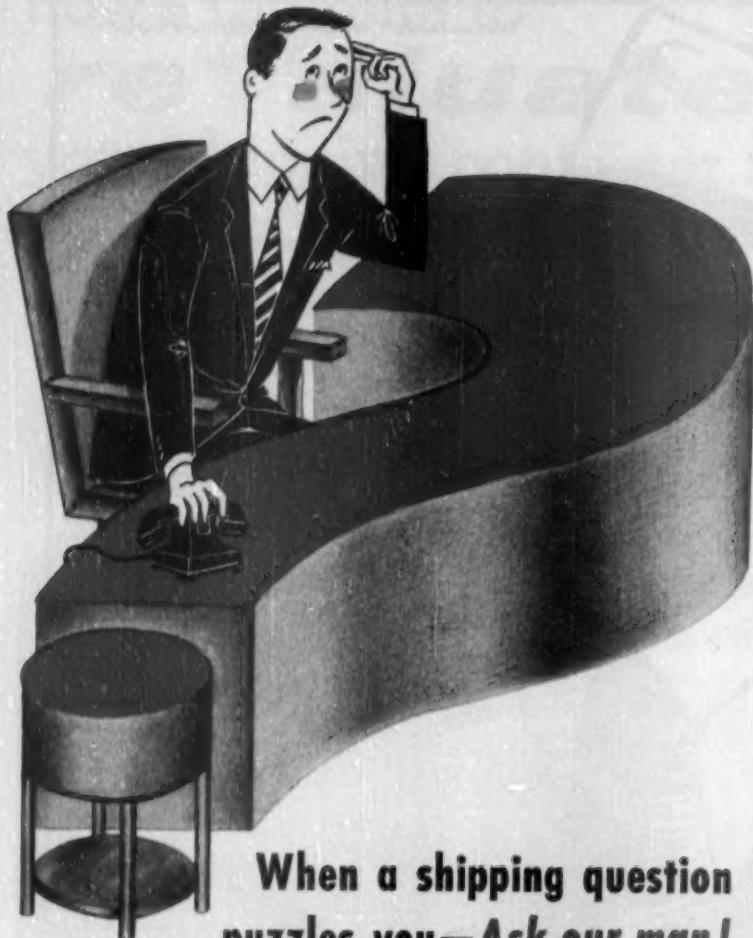
When money works, men and women work, too, and the goods they make . . . the wealth they create . . . strengthens and enriches the entire nation.

The Chase National Bank, first in loans to American industry, is proud of the contribution banking has made and is making to the progress of our country.

\*A small auxiliary loud-speaker designed to reproduce high audio frequency.

**The CHASE National Bank  
OF THE CITY OF NEW YORK**

(Member Federal Deposit Insurance Corporation)



## When a shipping question puzzles you—Ask our man!

• "How shall I ship it? When will it get there? Will it be on time?" When shippers are beset by questions like these they appreciate the friendly help of Baltimore & Ohio freight representatives.

These men, with their vast experience in freight problems and constant study of up-to-the-minute methods, welcome your questions. They know the B&O from A to Z, for they've been over its lines and personally studied all its operations. They'll explain the details of schedules and of such features as Sentinel Service on carload freight and Time-Saver on less-carload.

Ask our man whenever you need help. You'll find him skilled and courteous in helping to dispose of any harassing problem.



# Baltimore & Ohio Railroad

Constantly doing things—better!

Crawfordsville, Ind. There's also the Canadian subsidiary, Canadian Raybestos, Ltd., and an English affiliate (49% owned), Raybestos-Belaco, Ltd., which distributes the company's products in Europe. As the world's largest consumer of high-grade asbestos fiber, the company invested heavily last year in the Cassair (Canada) Asbestos Corp., Ltd., to assure a continuous supply of spinning fiber.

• **Keeping Ahead of the Joneses**—The company's philosophy of continuous product development has paid dividends over and over again. Take the case of clutch facings. Back in 1938, when R/M was supplying close to two out of every three clutch facings sold for original equipment and replacement in the automobile industry, its engineers recognized the threat to the product offered by automatic transmissions. So R/M went into the sintered metal business (which has some similarities with forming friction elements) to produce parts for the new market. Today, you can safely say that there's at least one R/M friction part on every automatic transmission sold in this country.

Clutch facings and automatic transmission parts are only two of several types of friction materials made by R/M. Probably the company's best known products are brake linings sold for replacement under the trade names Raybestos and Grey Rock. In its effort to stay ahead of the pack, the company has pioneered such items as woven brake linings, and semimetallic, dry-process, and bonded-to-metal brake linings.

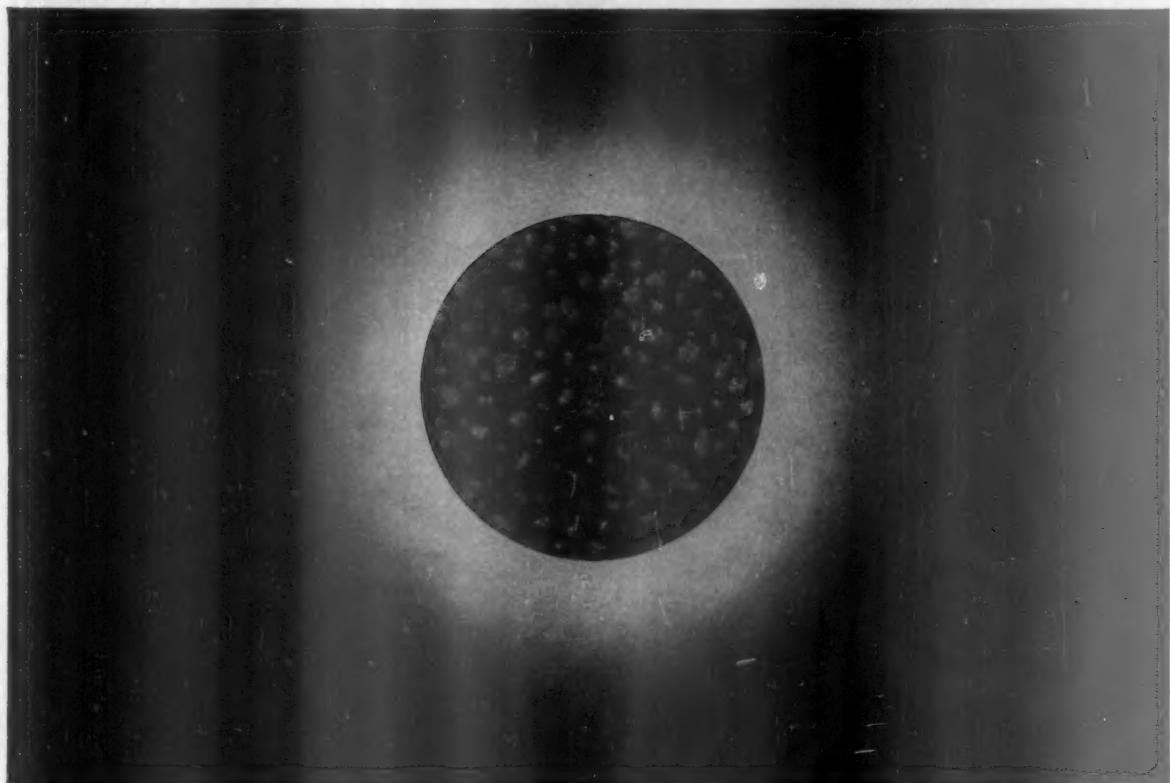
One of the hottest items today is known as the shoe exchange program. Companies send in brake shoes, and R/M lines them in the factory using a special resin-type bond.

• **New Materials**—The case of molded rubber products vs. plastics is an example of how it pays to see the competition coming before it hits you. One way or another, R/M has produced just about every molded rubber item you can think of. It even tried tires for a while in the early days of the horseless carriage, but gave that up because it felt it was better geared to handle engineered industrial items rather than mass production.

The company claims an impressive list of firsts in the rubber business: Among them it puts down the first rubber-covered conveyor belt, first commercial rubber power-transmission belt, first synthetic rubber goods. Rubber-covered rollers, rubber-lined equipment, and specialty hose for aircraft, automobiles, and oil fields are all major items. But though its rubber products were winning any number of successful applications, the company could see that plastics were coming along as

# WESTINGHOUSE

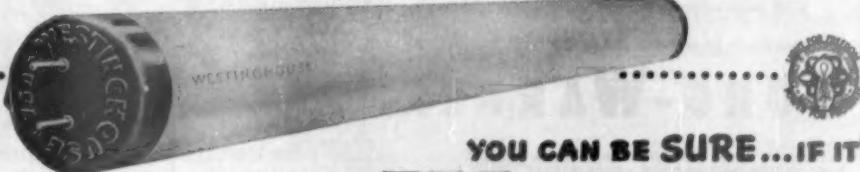
## Fluorescent Lamps Age Only 20% After 7500 Hours...do yours?



You are looking through a 2600 power microscope at minute particles of phosphor powder. This powder coats the inside of your fluorescent lamps and controls the light output. For peak light output, both initially and throughout lamp life, the particles must be uniform to within a few microns. This uniformity, visible in the photomicrograph above, is one reason Westinghouse

Standard Fluorescent Lamps age only 20% after 7500 hours of daily use. See for yourself how Westinghouse Lamps start bright, and stay bright even after 7500 hours . . . by trying some next time you order.

For details, contact your Westinghouse Lamp Supplier, or Westinghouse Lamp Div., Bloomfield, N. J.



YOU CAN BE SURE...IF IT'S

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Farmers spend less time in the field—  
*do more work*

...with the

**B-W PESCO PUMP**



With the rugged, dependable hydraulic system on the powerful Farmall Super C tractor with Fast-Hitch, farmers have complete finger-tip control of the tillage tools. Control that helps ease and speed their field work, thus saving time for other chores.

To power this work-saving, time-saving hydraulic system, International Harvester uses a small hydraulic pump engineered and produced by Borg-Warner's Pesco Products Division. Weighing only three pounds, it operates at 1200 psi, pumps 4½ gallons per minute at 2800 rpm. "Pressure Loaded", it provides a uniform rate of flow regardless of changes in fluid temperature, viscosity, or load conditions.

This application of Pesco hydraulic pumps to modern farming methods is a typical example of how Borg-Warner's broad engineering skills and extensive production facilities serve America every day—through the automotive, agricultural, aviation, marine, and home appliance industries.

**B-W engineering makes it work B-W production makes it available**

185 products in all are made by

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THESE UNITS FORM BORG-WARNER, Executive Offices, Chicago: ATKINS SAW • BORG & BECK BORG-WARNER INTERNATIONAL • BORG-WARNER SERVICE PARTS • CALUMET STEEL • CLEVELAND COMMUTATOR • DETROIT GEAR • FRANKLIN STEEL • INGERSOLL PRODUCTS • INGERSOLL STEEL LONG MANUFACTURING • LONG MANUFACTURING CO., LTD. • MARBON • MARVEL-SCHEBLER PRODUCTS • MECHANICS UNIVERSAL JOINT • MORSE CHAIN • MORSE CHAIN CO., LTD. • NORGE NORGE HEAT • PESCO PRODUCTS • REFLECTAL • ROCKFORD CLUTCH • SPRING DIVISION WARNER AUTOMOTIVE PARTS • WARNER GEAR • WARNER GEAR CO., LTD. • WOOSTER DIVISION



"... mechanical packings  
are the best example . . ."

**RAYBESTOS starts on p. 106**

possibilities for some of these jobs. So in it went.

One of its first ventures in the direction of plastics was a hard-rubber bowling ball first offered in 1939 and picked up again after the war along with roller-skate wheels. In the last few years, the company has been molding specialty items such as pump diaphragms and small parts out of nylon and fluorocarbon (Teflon) plastics. Last year, these new plastics items accounted for about \$3-million of the company's domestic sales of approximately \$75-million.

• **New Fields**—The engineers at Raybestos-Manhattan also let their eyes wander sometimes beyond the industries in which they already have a firm foothold with one product. Know-how with one material very often gives them an idea to try out on another.

Mechanical packings are probably the best example. These are materials that you wrap around moving parts to seal in fluids, gases, air, or steam. R/M makes them in the form of sheet, compressed sheet, gaskets, molded rings, braided and twisted rope. All of the materials used by the company have been worked into the act—asbestos, rubber, metal, plastics.

The company's know-how with asbestos takes it into many profitable lines. It makes a wide and expanding variety of products ranging from fillers for your electric iron cord to high-quality asbestos textiles for firefighter's suits, ironing board covers, theater curtains. These uses constantly expand: Special cables used on Navy submarines are one example, fire barriers in airplanes another. The latest item is a fine asbestos paper designed for electrical and heat insulation.

• **In the Works**—Know-how with materials is one reason why the company is now edging into molded high-temperature ceramic parts, as an outgrowth of its work with friction materials and abrasives. The company is an important factor in the grinding wheel business. It makes finishing and polishing wheels, cutoff wheels. About eight years ago, it got into diamond wheels for grinding carbides, quartz, synthetic sapphire.

Now the company is working with ceramic friction materials, which may be the new product that will eventually compete with present asbestos friction materials on high-temperature jobs. Whatever material gets the final nod for use on jets and missiles, it's pretty safe to say that R/M's engineers will be hot on the trail of any new one that might compete with it.



## Which knife was made for surgery?

**The answer—**incredible as it may seem—is *both*. But the one at left was made in the 16th Century—from steel. It was a symbol of terror and death. And the one at right was made today—from special *alloy* steel. Sharper, stronger, highly resistant to the attack of powerful disinfectants, it is a symbol of hope and life.

That is but a single page in the story of alloy steels. For these are the steels which have also made possible today's ships and planes . . . skyscrapers and locomotives . . . machine tools and home appliances. These are the steels whose superior physical properties are "built in" with Vancoram alloying elements.

Developed and produced by Vanadium Corporation's integrated network of mines and mills, Vancoram alloying elements include ferro alloys of chromium, vanadium, titanium and silicon as well as master aluminum alloys. Increased quantities are now being delivered to every phase of the American metals industry.



Uranium concentrates for America's growing atomic energy program are extracted from vanadium-uranium ore at Vanadium Corporation's mill at Durango, Colorado.



Stainless steel walls cut construction costs of Pittsburgh's Gateway Center skyscrapers—while increasing their beauty, efficiency and weather resistance.



New \$3,000,000 plant of Vanadium Corporation at Cambridge, Ohio, now reaching peak production, produces special alloys for the growing aluminum industry.

### VANADIUM CORPORATION OF AMERICA

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PLANTS—Niagara Falls, N.Y.; Graham, W. Va.; Cambridge, Ohio; Durango and Naturita, Colo.; White Canyon, Utah

MINES—South America, Southern Rhodesia, Canada, U.S.A.



Producers of alloys, metals and chemicals

# Forty Phones on a Party Line

Bell Laboratories is doing it with transistors in a rural Georgia tryout. Five can use the line at once; you only hear your neighbor if he's on the same frequency.

This week in Americus, Ga., a small town 135 miles south of Atlanta, technicians of the Bell Telephone Laboratories are testing out a new idea that is likely to make the telephone a staple farm item.

• **Multiplying**—What has held back rural service has been the high cost of running lines from a central exchange in the nearest town. You had to put up one pair of wires for every party line—or up to 15 miles of wire for maybe eight families. That put the telephone in the luxury class for most rural families. But the new development from Bell Labs makes it possible for five times as many families to use the same pair of wires—that's 40 families on one line.

Key element in this new rural service plan is the transistor—the tiny amplifier that Bell Labs developed six years ago. With transistors, you can send a number of messages over a single pair of wires at the same time without hearing garbled chatter when you lift the receiver. That's because the transistor, like the vacuum tube, makes it possible to send out each message on a different frequency.

The parent of Bell Labs, American Telephone & Telegraph Co., has been using multifrequency transmission for years—with vacuum tubes—on longer-distance calls. But the system under test in Georgia is the first ever to use transistors to create those extra frequencies. Also, it is the first to use multifrequency telephoning over very short distances.

• **Costs Go Down**—With transistors, you need very little power—about one-twentieth as much as a vacuum tube system requires. That means you can use a small battery to power each set of transistors. The battery will be good for two or three years, won't require charging.

The transistor systems are cheaper to make. Bell Labs is talking about making the units automatically by machine (BW-Mar. 6 '54, p55). That would mean stamping out the circuits on a mass-production basis—rather than by the more costly method of wiring each of the hundreds of tiny components, soldering them together by hand.

• **Tryout**—The all-transistor system at Americus will eventually handle more than 300 telephones. That won't take in all the phones in the area, but Bell Labs is only aiming at a pilot operation now. After it has checked the system for bugs, the lab crew will turn the

whole idea over to AT&T's manufacturing unit, the Western Electric Co., for production for other rural systems in the company's far-flung telephone network.

Right now, the Americus system has more than 300 transistors under test. Most of these—along with resistors and capacitors—are encased in small units that hang on telephone poles outside town. It takes 128 transistors, plus a battery, for every 32 rural telephones.

Here's how they work: About 10 miles from town, say, the telephone company installs one of the small units on a pole. Feeding into it are two telephone wires, connecting with the central exchange in town. Inside the unit, there are five separate transistor circuits, each on a different frequency. Messages can be sent simultaneously on each of these five frequencies; that means five calls at a time over one pair of wires. At eight phones per frequency, you get your 40 phones on one line; but of course, only one phone per frequency can be used at a time. So each eight phones operate much as they would on the old party line.

## PRODUCTION BRIEFS

The world's first commercial moving sidewalk will go into operation soon in Jersey City, N. J. It will handle 10,400 passengers an hour, will shuttle between the stations of the Erie Railroad and the Hudson & Manhattan Railroad. Goodyear Tire and Rubber Co. and Stephens-Adamson Mfg. Co. built the 227-ft. conveyor. General Electric Co. developed the electrical system.

Construction of Westinghouse Electric Corp.'s \$45-million appliance plant at Columbus, Ohio, has been completed. About 800 units are turned out each day; that figure will be boosted to 4,000 in a few months. The newly constructed plant, which contains more than 2-million sq. ft. of working area, has 27-mi. of conveyors and 51 separate conveyor systems.

• **Helicopters** that weigh as much as 100 tons, fly at speeds of 180 mph., were predicted last week by Frank N. Piasek, one of the leading helicopter producers in the U.S.



THE BOSTON MAN  
IN 1954



IN CLEVELAND, OHIO . . .  
William H. Summers, The W. H. Summers Co.



IN HOUSTON, TEXAS . . .  
George T. Morse, Jr., Peden Iron & Steel Co.



IN INDIANAPOLIS, INDIANA . . .  
George L. Stalker, W. J. Holliday & Co.

\* William H. Summers, The W. H. Summers Co., 400 Lakeside Ave., N.W. (Phone Superior 1-1745) keeps industries in and around Cleveland well supplied with Boston products. More than 25 years of experience assure expert handling of customers' requirements.

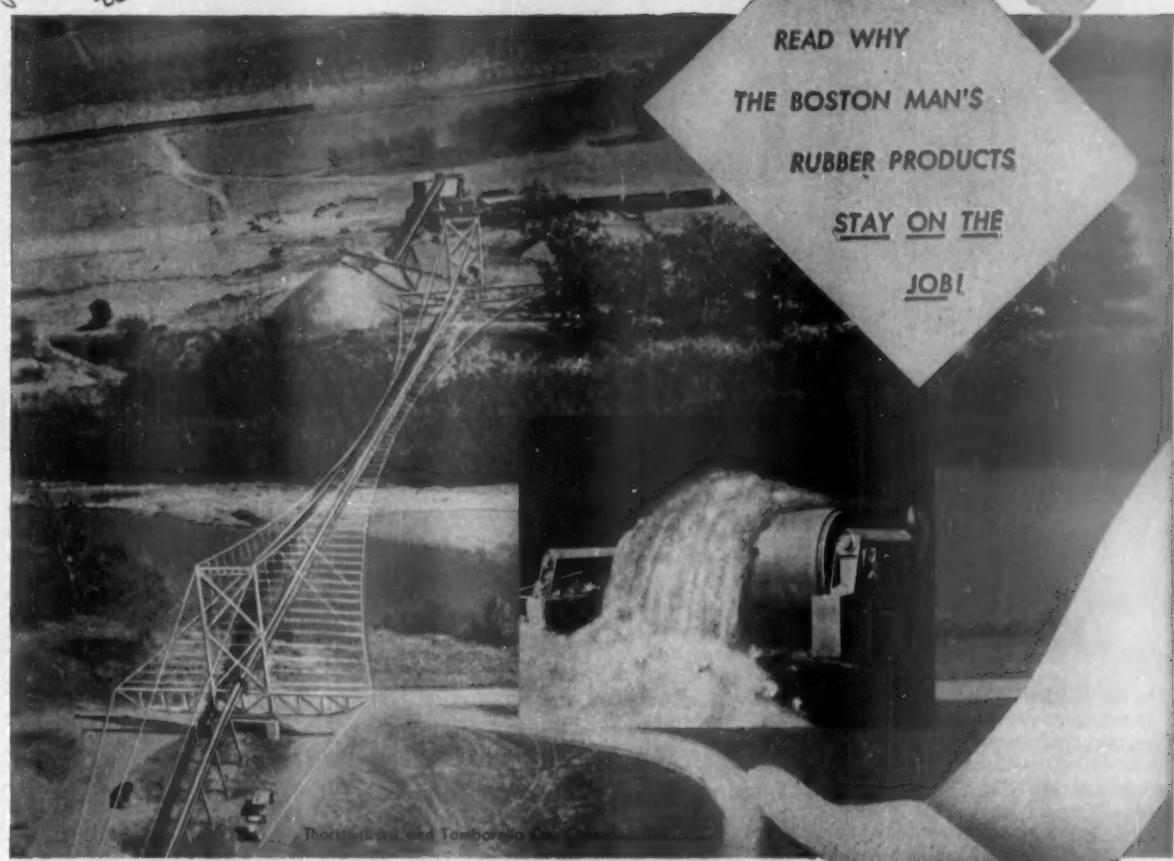
\* George T. Morse, Jr., Peden Iron & Steel Co., P. O. Box 1891 (Phone Capital 2131) serves oil, chemical, construction, steel and sand and gravel industries of East Texas. This large, active organization has represented Boston since 1911, was "Boston Man" who handled job at right.

\* George L. Stalker, W. J. Holliday & Co., 545 West McCarty St. (Phone Plaza 2422) has distributed Boston products to industries of the Indianapolis area for the last quarter century. An experienced sales force offers a complete line of Boston mechanical rubber products.

See the Boston Man in your area. Check your Classified Directory or write Boston Weaven Hose & Rubber Co. →



THE BOSTON MAN  
IN 1880



READ WHY  
THE BOSTON MAN'S  
RUBBER PRODUCTS  
STAY ON THE  
JOB!

## HOW OFTEN WOULD YOU SHUT DOWN AND REPAIR THIS CONVEYOR BELT?

At this Texas gravel deposit, a 1795-ft. Boston conveyor belt has moved 508 tons of coarse material per hour of operation during the last three and a half years. Yet work never halted for repairs on the belt! It looks and performs today like the day it was installed.

Boston products stay on the job. The Boston organization offers the advantages of mass production without the penalties. It's big enough to have complete research and production facilities, yet at Boston, the era of the craftsman still exists. Fine rubber products from steam hose and V-belts to tape and packing are made with the care of custom-built materials by skilled New England rubber specialists. Don't your requirements deserve this kind of care?

See our distributor in your area. He is your "Boston Man."

# BOSTON

BOSTON WOVEN HOSE & RUBBER CO., Box 1071, Boston 3, Mass.

Industrial Hose • Belting • V-Belts • Packing • Tubing • Garden Hose • Tape • Matting



*It's not the JUMPS  
but the BUMPS!*

On the battlefield or miles behind it, shock and vibration can wreck electronic equipment as surely as bullets. Equiflex vibration isolators, however, absorb vibration and protect equipment from shocks of considerable magnitude. They're made by United-Carr's Ucinite division and their metal construction insures long life, resistance to temperature extremes and complete freedom from permanent misalignment.

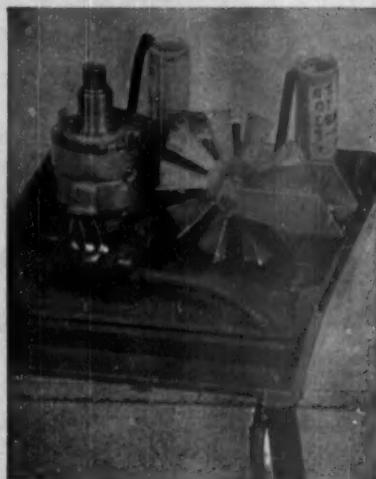
Mounts, sockets, switches, connectors and specialized fasteners... these and countless other devices, designed and manufactured by United-Carr and its subsidiaries, are helping speed assembly, cut costs and even improve product performance for leading manufacturers of electronic apparatus, automobiles, aircraft, appliances, furniture. So, if you need special fasteners or allied devices in volume, check first with United-Carr—FIRST IN FASTENERS.

**UNITED-CARR**

United-Carr Fastener Corp., Cambridge 42, Mass.

MAKERS OF **DOT** FASTENERS

## NEW PRODUCTS



### Self-Service Lights

The contraption above is an automobile headlight dimmer. It is the first on the market to operate with transistors, according to the Radio Receptor Co., Inc., Brooklyn, which developed it for the Sparton Automotive Div. of Sparks-Withington Co.

The dimmer is mounted in a case on top of the dashboard.

The case has a window on the side facing the windshield. Light from an oncoming car enters by the window, puts the device to work.

As you drive along, the pinwheel device shown in the picture spins around—it is turned by the same mechanism that powers the windshield wipers. When a car approaches you at night, light from its headlights strikes the dimmer. Most of the light is blocked by the pinwheel, but some goes beyond it, activates a phototransistor. This sets up a tiny current, which is boosted by a second transistor, sent on to operate a relay. The relay closes, dims your lights.

When the car has passed, no more light comes into the dimmer. Your lights go up to bright again.

The automatic dimmer does not put the old foot button dimmer out of business. You can still use it if you want to.

• Source: Sparton Automotive Div., Sparks-Withington Co., E. Michigan at Horton, Jackson, Mich.

### Bombarded Plastic

A new version of polyethylene—the squeeze bottle plastic—turned out by General Electric Co.'s chemical division has two unique properties. Unlike other polyethylenes, this one stands up under high temperatures up to 350°F. It also

resists cracking when it comes in contact with active chemicals.

The company gives the plastic these properties by bombarding it with high-energy cathode rays from electron generators.

GE expects the plastic, which it produces in narrow ribbon form, to aid the development of smaller electrical equipment and the creation of heat-resistant transparent containers that can be sterilized, for foods, drugs, and pharmaceutical products.

• Source: General Electric Co., Chemical Div., Pittsfield, Mass.

### Missiles That Won't Miss

It takes from \$50,000 to \$100,000 to build a guided missile. It's money you never get back, because missiles are strictly one-shot weapons (BW—Feb. 27 '54, p 78). To make things tougher, many things can go wrong inside one of the complex birds. You don't know whether it is going to work that one time until it is too late to do anything about it.

Last week Northrop Aircraft, Inc., said it had developed an electronic device that will take much of the guesswork out of missile firing. Christened Mimi, the unit subjects a missile to simulated flight conditions—such as air pressure at different altitudes—and makes the equipment perform as it would in flight. If any component functions improperly, Mimi spots it, and the part is taken out and repaired or replaced.

Northrop developed the testing device for the Air Force. It says that it has cut testing time for missile guidance systems at the factory in half.

• Source: Northrop Aircraft, Inc., Northrop Field, Hawthorne, Calif.

### NEW PRODUCTS BRIEFS

To entertain the children on long auto trips, Cardinal Creations, 6322 S. Harvard Ave., Chicago, has concocted a kit of six motor trip games. Retail: 59¢.

A crashproof kite, made of du Pont's polyester film, Mylar, is available from the Aeroflex Corp., New Haven, Conn., which is making it for military use—rafts, downed planes—and for the kiddies.

To reduce engine noise on power lawn mowers, Reo Motors, Inc., 1331 S. Washington Ave., Lansing, Mich., has come up with a muffler that it says cuts the clamor in half. Retail price: \$2.95.



## At what age should a man retire from business?

ONE THING IS SURE. You want to plan for your retirement . . . not be "retired" prematurely by a disastrous fire which destroys the records your firm must have to stay in business.

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Scores of "retired" businessmen can tell you that an old safe, or *any* safe without the Underwriters' Laboratories, Inc. Label will incinerate its contents when the temperature inside gets above 350° F. They can tell you a fireproof building will just *wall-in*

an office fire, too. Make it *hotter*. And they can show you the clause in your fire insurance policies that says you must provide "proof-of-loss within 60 days" to collect fully—which takes *records*!

### See how deadly this danger really is?

It's so deadly that 43 out of 100 firms that lose their records in a fire never reopen. And the rest go through years of difficult readjustment problems.

How do you know your firm isn't among

the 70% now risking disaster because of inadequate protection? Check on it! Get a *free* Mosler FIRE "DANGERater." Find out your "DANGERating" and get the protection it *calls* for. But don't trust anything less than the *best*. Mosler is recognized as the leader for styling as well as protection features. Consult classified telephone directory for the *Mosler* dealer in your city. He has a full line of famous Mosler Record Safes. See *him*. Or mail coupon for "DANGERater," today!

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 Illustrated catalog, describing the new series of Mosler Record Safes.

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FIRM NAME.....

ADDRESS.....

CITY..... ZONE..... STATE.....

# MARKETING



PLAY CLOTHES, new line launched by Williamson-Dickie Mfg. Co., are a result of the company's research program of . . .

## Asking the Consumer What He Wants

"The experts don't know what the consumer wants. Only the consumer knows."

In these words, C. D. Williamson, president of Williamson-Dickie Mfg. Co., sums up what is perhaps the major concern of today's merchandising. The Fort Worth manufacturer has found

that even in its prosaic line—work clothes—the consumer has definite likes and dislikes. The company credits a good part of its tremendous postwar growth to its almost fanatical effort to discover those wants. Right now, it is shipping to market a line it has never made before—casual clothes for men and boys (picture)—because its customers asked for them.

• **Finger on the Pulse**—Take a look at W-D's new Don Knit shirt in the picture. Before the company settled on this particular product, it poked around, made a lot of surveys. It found that everyone likes the T-shirt for the comfort of its knitted material. But a T-shirt looks like an undershirt. What's more, its neckline can stretch, pull out of shape. To fix that, W-D put a sport-shirt collar on a T-shirt; the collar was of woven, not knitted cloth. Because the surveys showed men don't like pullovers, the Don Knit shirt buttons up the front.

Scenting out consumer tastes is an old Williamson-Dickie tradition. The company runs its business as an applied science. Its scientific approach dictates rigid formulas for its executive training program, sales training, dealer aids,

plant operation, and personnel. It even has a consulting anthropologist.

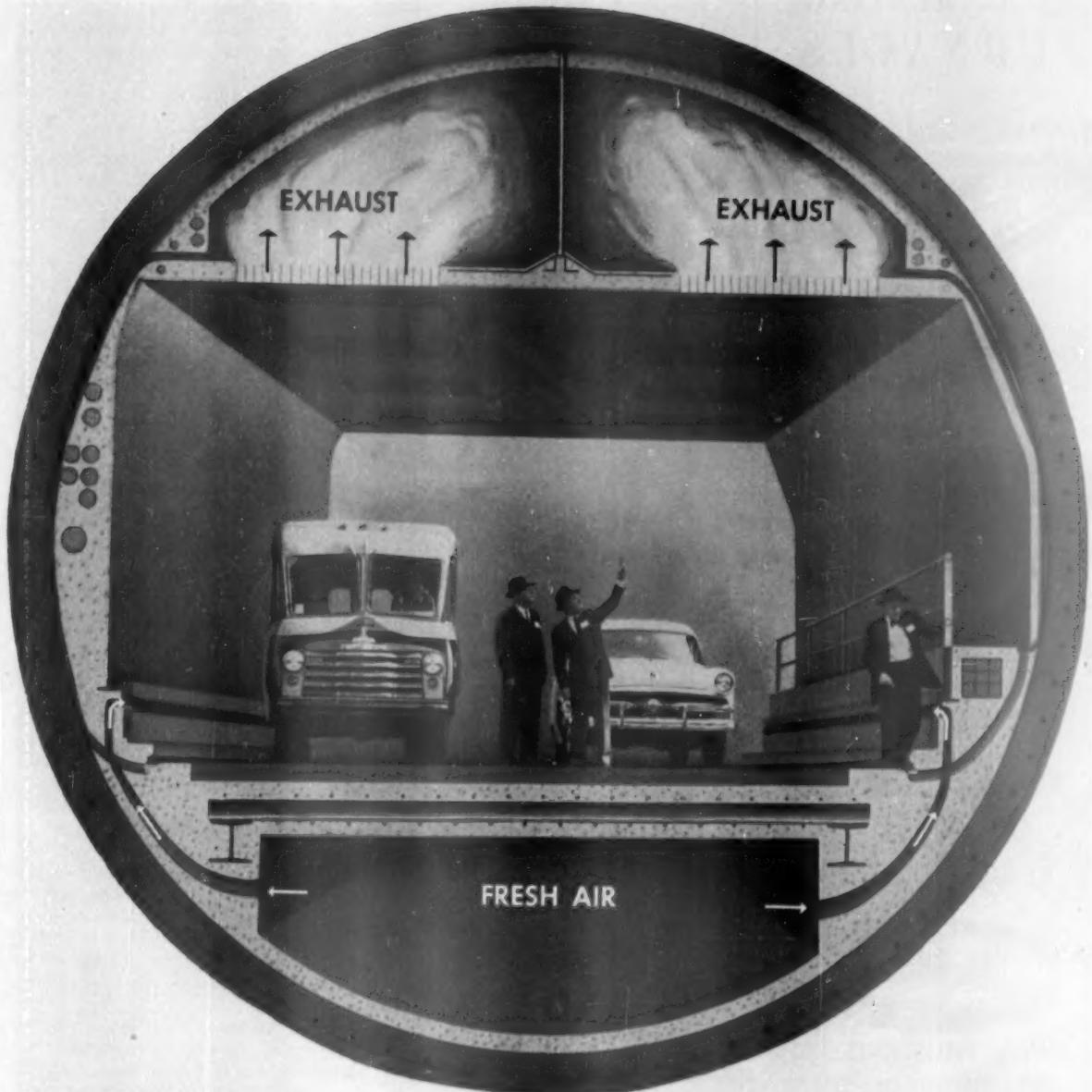
The results of its academic methods are nothing if not practical. Prewar Williamson-Dickie was doing a \$2-million business. By 1949, sales were up to \$10-million; in 1953, to around \$18-million. While it's not the largest work clothes maker, W-D does call itself the biggest producer of matched work shirts and pants. It has six plants (four of them opened within four months in late 1952 and early 1953), with warehouses across the country.

• **Launching Leisure Wear**—The new move into an entirely new type of garment is probably the most striking result of Williamson-Dickie's find-out program. In adding leisure clothes, the company is joining up with a strong long-term trend: the gradual overlapping of work and casual wear (BW—Nov. 15 '52, p46). Workmen, better paid than prewar, want to look better at work. At the same time, the growing ranks of suburbanites who are sweating out the do-it-yourself trend want "work" clothes to loaf in, mow the grass in, and look smart in when the neighbors drop by.

Blue Bell, Inc., biggest of the work



WORK CLOTHES are W-D's mainstay. Here Hobbs employees wear them.



## Preview of New Hudson River Tube

Work is getting into full swing on a third tube for the Lincoln Tunnel beneath the Hudson River between New York City and New Jersey. Crews are sinking land shafts at the tunnel site, and 90 miles to the west, in our Bethlehem, Pa., plant, foundrymen and machinists are at work on the iron and steel lining.

The additional tube will be 31 feet in diameter and 1½ miles long, with the lining built up piece by piece of more than 30,000 individual segments bolted together. Most of the segments will be made of cast iron, for use where the tunnel goes through the mud and silt of the river bed. In the portions of the tunnel that run through solid rock seg-

ments made of steel will be used for their superior strength.

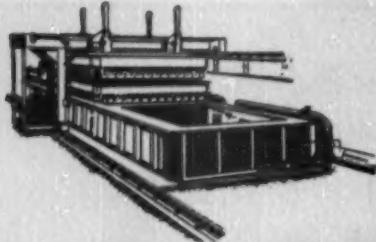
Above is the actual-size simulated section of the tube that we set up at the Bethlehem plant at the time engineers of the Port of New York Authority, owners and operators of the tunnel, made an inspection trip late in the fall. The large outer ring shows how the segments are fastened together to form the lining.

The Lincoln Tunnel now has two tubes, with four lanes. The new tube, to open in 1957, will increase the tunnel's annual capacity by 50 per cent, and will enable it to handle double the present volume of morning and afternoon peak-load traffic to and from Manhattan.

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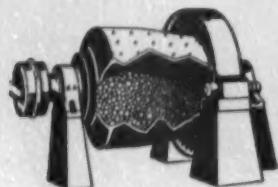
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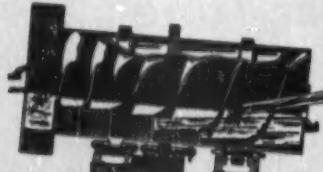
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clothes manufacturers, claims it pioneered the play clothes field. Sweet-Orr & Co., Inc., another pillar in the field, has for some years had a line of sportswear. Williamson-Dickie waited till it was sure it knew what the consumer wanted. Because it depends on a low-cost, low-profit item, it couldn't afford to be wrong.

• **Getting There Fast**—It was back in 1944 that Williamson-Dickie first began to take the consumer's fancies seriously. The day of big Army sales was coming to an end. A lot of new companies had come into the field during the war. Competition would be tough. The way to keep ahead, Williamson figured, was to get to the civilian consumer fast—with a product he wanted.

With no experience in consumer research, the company called in a consultant, Booz, Allen & Hamilton, of Chicago. During the next year, Booz, Allen interviewed 1,000 work clothes wearers.

• **Industry Ignorance**—The interviews unearthed a lot of information. But the prime conclusion Williamson drew from them was that an industry can be way off base. What the manufacturer thinks is essential may be a detail the consumer doesn't give a hoot about.

Here's one small point as illustration. The work clothes makers had for years considered it practically axiomatic that consumers wanted fine stitching to dress their work clothes up. The first survey turned up the fact that the consumer didn't care a rap for fine stitching.

Moreover, Williamson concluded that neither manufacturers' salesmen, nor the buyers, nor the retailers had any clearer picture of what the consumer wants than the manufacturers.

• **Polling the Customers**—After those first interviews, consumer research was in. W-D hired Harry K. Werst away from Booz, Allen, made him vice-president in charge of operations. Then it started making surveys on its own.

At first it did them the hard way, man by man, like the Gallup poll. But Williamson had learned a trick or two during his war stint as member of advisory committees for the War Production Board and Office of Price Administration. When the Quartermaster Corps wanted to use condensed milk on cereal, it didn't take a poll. It put 150 soldiers in a mess hall and sat them down to bowls of cereal and condensed milk. In no time flat it found out the combination didn't go over.

Williamson applied this group technique to his own studies. "We got 60 men in a room, all wearing the same garment," he recalls. When W-D staffers started tossing questions, they found out plenty—both what was right

and what was wrong. The result: an entirely redesigned line.

In the early days of its consumer research program, the company went to workers outside its own plant. Now it starts with small panels of its own employees. "We have found they'll give us honest answers," Williamson says. If they pick one garment over another by a score of 65 to 35, that's good enough. If the vote isn't that lopsided, W-D goes to workers outside its plant.

• **All for Looks**—Over the years, W-D has gleaned pretty definite ideas on what its ultimate customers are looking for. Williamson rates them in this order:

- Looks.
- Comfort.
- Economy.
- Adaptability for special conditions.

Comfort and economy have always rated high on work clothes scores. Yet economy now takes third place.

What has happened? The factory worker has upgraded his whole scale of living, for one thing. Also, a good deal of this new style consciousness grows out of what Williamson-Dickie calls the "coeducationalism of industry." Put women in a plant and the men get to fussing over the cut of their jib—one reason, perhaps, for the demand for work clothes in lighter colors. One thing W-D has done to make clothes more shipshape: It uses a patented angled or "drop" shoulder, which makes a better fit.

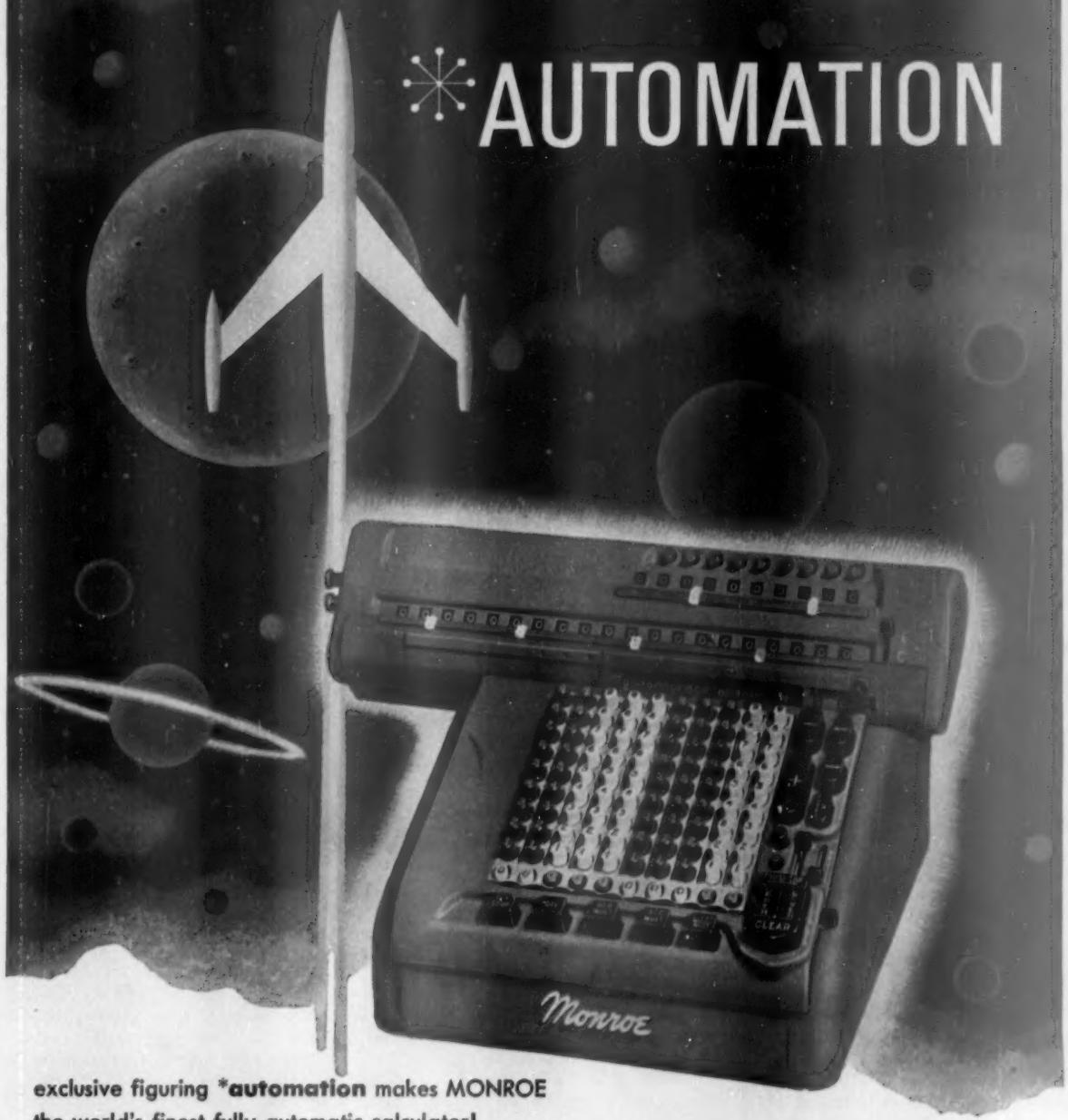
• **New Trend**—In recent months, Williamson-Dickie's research has underscored another trend: demand for lighter weight Army twill shirts (6-oz. twill) as against the 8.2-oz. twill that used to be tops. Oddly, it's the colder areas that are asking for the lighter twill.

• **Cost Angle**—If you are going to weigh the consumer's likes on every detail, it can cost you money. Some years ago, W-D used Sanforized cloth for its pants but not for the linings. People complained that the linings were causing the waistbands to shrink. W-D switched to Sanforized linings despite the added cost.

Sometimes, though, research works the other way. Government figures showed that a six-footer needs two more inches of cloth in the seat of his pants than a shorter man with the same waist measurement. W-D graduated seat measurements, saved considerable cloth in the process.

On the consumer program, Williamson has only one word of warning: Don't expect any help from the consumer on price. Ask him whether he would spend 50¢ more for a certain type of pocket, and he'll either not know or be too proud to say no.

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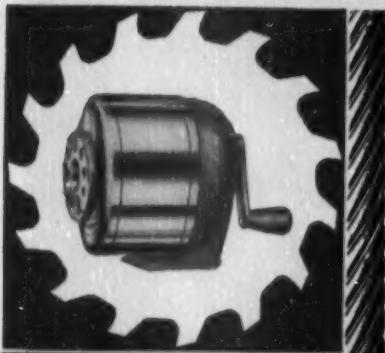


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## FENCE



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## "Fair Trade" Hit

**Florida Supreme Court says it's unconstitutional to bind nonsigners to retail price maintenance.**

In a ruling of more than usual interest, the Florida Supreme Court held last week that a key provision of the state's so-called Fair Trade Act is unconstitutional. The state court acted on grounds that attack the chief prop on which the resale price maintenance laws now rest.

This provision—without which fair trade laws would be meaningless—allows manufacturers to bind all retailers to a minimum price for their products by signing a contract with a single retailer. By finding against this provision, the state high court upheld the Hillsborough County Circuit Court at Tampa, which had turned down appeals by Bayer Co. division of Sterling Drug, Inc. (Bayer Aspirin), the Chas. H. Phillips Co. division of Sterling (Phillips Milk of Magnesia), and Miles Laboratories (Alka-Seltzer) for a court order to enforce price minimums against operators of Eckerd's Drug Store. The store had not signed minimum price contracts with these particular manufacturers.

• **Signer**—At the same time, though, the Supreme Court refused to interfere with the efforts of Sunbeam Corp. to enforce a minimum price contract that Chase & Sherman, Inc., of Miami, had signed with the company.

Here's why the ruling has particular significance.

Last fall, the U.S. Supreme Court refused to review the Schwegmann Bros. case, charging unconstitutionality of the Maguire Act (BW-Oct. 24'53, p50). This left the Old Dearborn whiskey case of 1936 the last word from the high court on resale price maintenance (BW-Nov. 7'53, p43). In the Old Dearborn case, the Supreme Court said that "the primary aim of the law is to protect the property—namely the good will of the producer," which he still owns after he has sold his goods. The price restriction, the court said, was a means to that "perfectly legitimate end."

• **Hampering**—Now Justice Glenn Terrell of the Florida Supreme Court has held otherwise. The real effect of the nonsigner clause, he said, is not protection of the good will of trademarked products. It is to hamper competitive price fixing. Good will, he went on to say, "should be determined by the price which the goods can command in a competitive market, and not by the ability of the manufacturer to sell at a

pegged retail price which he himself selects."

Terrell argued that except in times of economic emergency such inflexible price arrangements "are not in line with our traditional concepts of free competition, which have traditionally been the yardstick for the protection of the consuming public." The real vice of the nonsigner clause, he said, is the absence of that standard. Hence the nonsigner clause is an invalid use of the police power for a private, not public purpose.

This is the state court's third refusal to clear the nonsigner clause.

## The Sap Is Running

### In Do-It-Yourself

Now that it's spring, do-it-yourself is breaking out all over. More and more companies are cashing in on this fabulous trend, a \$3.5-billion market, according to estimates by Retailing Daily.

Right now, the big news is the shows. In New York City this week William Orkin, expositor, opened up this city's second do-it-yourself show. Some 125 exhibitors are on hand this year, against 55 last year (BW-Mar. 21'53, p33). Before the second day of the week-long exhibit had ended, nearly 11,000 expectant home handymen and handywomen had turned out to learn the tricks of their leisure-time trade.

Meanwhile, the fever is catching. In Houston, Tex., this week, the Downtown Optimist Club opened what it thinks is the first do-it-yourself exposition in the Southwest. It's a big one, too, with nearly 100 exhibitors. Boston and Chicago have also had shows, under Orkin's direction; St. Louis, Philadelphia, Cleveland, Detroit, and other cities are scheduled to get them.

Manufacturers of all varieties continue to feed the do-it-yourself pipelines. One of the most interesting ventures to capitalize on the make-it-yourself business is Cohasset Colonials, of Cohasset Harbor, Mass. This company is headed by Francis Hagerty, former boatmaker. Three years ago he switched to a new field: selling kits that make the home carpenter a maker of antique furniture. Hagerty offers 26 knocked-down pieces of copies of colonial handicraft—cobbler's benches, Windsor chairs, trestle tables, and the like. Today he sells the kits, mostly by mail order, to the number of 15,000 to 20,000 a year. He and his wife scout around New England searching for models, bring out a new piece every two months.

Hagerty and his 10 employees try to give their products authentic flavor: same wood as the colonials used, the same methods of treating and finishing.



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**GENERAL**  **ELECTRIC**



**FAST-MOVING** Fred Harvey blew into Nashville 11 years ago to take over a sluggish department store. He gave it the nazzle-dazzle treatment—including a carnival decor complete with hobby horses and live monkeys—and made Harvey's the top store in the city. But in 1951 a lease wrangle started when . . .



LEBECK BUILDING (outline) lease was snagged by Harvey competitor,

Cain

## Nashville's Flashiest Merchant

A legal fight smoldering in Tennessee's Supreme Court this week is likely to determine the future retailing pattern for Nashville, Tenn., one way or another.

• At stake is one of the most valuable slices of real estate in downtown Nashville.

• The feud bares the sharp competitive clash of two neighboring department stores—Harvey Co. and Cain-Sloan Co.—the biggest in Nashville.

• An adverse decision could short-circuit flashy Fred Harvey, owner of Harvey Co., who hit Nashville merchandising like a bolt of lightning 11 years ago and has been electrifying the atmosphere ever since.

• Crisis for a Dynamo—In a little over a decade, by dint of a rare display of dash, splash, and just plain smart policies, Harvey has turned a half-million dollar retail setup into an \$11-million business. Today he has the top store in the city. In the process, he's made Nashville's old-line stores—such as 50-year-old Cain-Sloan—flinch.

Now Cain-Sloan is pressing for legal action that could throw Harvey right out of his store—or at least the central Lebeck Building, heart of the physical layout (picture).

• Lease Wrangle—The root of the trouble was the expiration of Harvey's lease on the Lebeck Building on Dec. 31, 1953. But the sparks started flying back in April 1951.

At about that time, trustees of the Lebeck property have testified they concluded they couldn't come to terms with Harvey on a new lease after in-

tensive negotiations. Then Cain-Sloan made an offer and trustees accepted.

So in April Cain-Sloan signed the lease for 25 years, subject to chancery court approval because it would probably extend beyond the term of the trust, due to end at the death of certain heirs. The lease calls for a guaranteed minimum rental of \$125,000 a year tied to the Bureau of Labor Statistics cost-of-living index, or 2.5% of gross sales based on a proportion of floor space—whichever is greater.

In short order, Harvey hit back with an offer of \$135,000 straight minimum, or a \$125,000 minimum tied to the BLS index, or 2.6% of gross sales. Trustees refused on the ground that the C-S lease was binding. Then Harvey tried unsuccessfully to intervene in the chancery court suit. Finally Harvey got his foot in the door: When the court appointed guardians to protect the interests of certain Lebeck heirs, the guardians filed a fact-finding cross bill naming C-S, Harvey, and the trustees as defendants. The new bill broadened the case to include the puzzler: Which would be in the best interest of the heirs—a Cain-Sloan or Harvey Co. lease?

• Round and Round—Cain-Sloan pitted its 50 years of successful operation against Harvey's phenomenal sales growth. In March 1953, the chancery court clerk recommended that the C-S lease be approved. Two months later, the chancellor overruled his clerk and approved a Harvey lease order.

But that victory was reversed by the court of appeals in January 1954 on

grounds that the trustees did not need court approval in the first place. Harvey immediately announced that he would seek a review of the case by the Tennessee Supreme Court. The court is expected to decide whether it will review the case within a month.

Meanwhile, since Harvey's lease expired at the end of 1953, Lebeck Building trustees have filed an eviction suit. They are accepting rental payments from Cain-Sloan and rejecting those from Harvey.

• Enter Harvey—Harvey's comment: "I never made a decision predicated on defeat." There's no doubt that defeat is one word that would hang strangely on the Canadian-born merchant who's kept Nashville in a dither since 1942.

Harvey blew like a whirlwind into a city where scads of businessmen have a "Jr." or "III" tacked behind their names, where management of many firms passes automatically to the sons and grandsons of the founders. Behind him, he had wide experience in stores in New York City, Dallas, Boston, Detroit, and Cincinnati. He had been merchandise manager of the basement of Marshall Field in Chicago.

Harvey took over the Denton Co., occupying most of the Lebeck Building. The department store was well-situated with a 40-ft. frontage on Church St., a main artery (picture), but had a relatively pallid volume of \$560,000. That put Harvey next door to Cain-Sloan, which had a bigger frontage, a spot on the city's busiest corner, and a volume of \$2.8-million.

• Make It Fun—But Cain-Sloan's edge

Cain-Sloan Co. (right).



LONG-STANDING retailer John Sloan heads C.S., a 50-year-old enterprise. He sees Harvey as an upstart. For the past few years he has been in court fighting Harvey to retain the lease that would cripple his neighbor's operation. He won the last round. Now it's up to the State Supreme Court.

## Fights to Save Store

faded fast when Harvey started loosing the hoopla tactics and progressive policies that have never ceased amazing Nashvillians. First thing that startled the buying public was the spectacle of purple walls, violet ceilings and pink showcases. Since it was impossible to remodel the store back in the early days of World War II, Harvey made paint do the job of bowling over the customer. He's been repainting the wild colors ever since.

In 1946, Harvey made a hit by bringing the moving stairway to a Nashville store. Strictly for a gag, he posted a warning: "You are not permitted to ride the stairs in your bare feet." The moving stairs are still a major source of entertainment for Nashville kiddies. An interesting sideline is that the stairways are in the Lebeck Building; Harvey contends he will be able to remove them if he loses the case. Cain-Sloan says they will stay.

The moving stairs are one way Harvey dramatized a favorite motto: "It's fun to shop at Harveys." Make the kids love it, he holds, and they'll drag their parents in. Harvey has stopped at nothing to win their affection. In fact, the store looks like a junior-grade carnival. Real merry-go-round horses set the tone of the decor. Crazy-house mirrors set up in strategic spots make you look tall, short, or just plain silly. If that doesn't do it, the cage of live monkeys in a circus wagon will. Next to the cage is a "monkey bar" where you can buy light refreshments.

But even if a Nashvillian had never entered the store, he would still have

had a dose of Harvey showmanship. Last year, during his pre-Christmas sale, Harvey floated a 15-ft. blimp on a rope 400 ft. above the store's roof. (It fluttered down ignominiously, the victim of a shotgun blast.) Harvey also presented the city with what is claimed to be the largest nativity scene ever built (cost: \$20,000). And at Easter time, the store sponsors an annual costume parade with plenty of prizes.

• **Thumper**—Harvey has managed to stamp his name indelibly on the shopper's mind with his profuse newspaper and radio advertising. The city had never seen anything like it. In 1953, Harvey bought 3,682,000 lines of advertising in the two Nashville dailies—more than the next two department stores combined. He also put up 200 billboards in towns outside Nashville, is credited with making it the shopping center for thousands of middle Tennesseans.

• **Pace-Setter**—But Harvey doubled the impact of his splashy gestures by pioneering progressive policies that have made him the housewife's hero. He cut out customary red tape to make it easy for customers to open charge accounts. He was the first Nashville merchant to come up with a liberal policy on exchange of merchandise, and refunds where there can be no satisfactory exchange. He introduced night openings in the city. He invited customers to call the store collect to order merchandise. In almost all these moves, other Nashville stores were impelled to follow Harvey's lead.

The huge success of Harvey's whole

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MINUTES  
away is your  
Fire Department?

?

### Fire Works Fast.

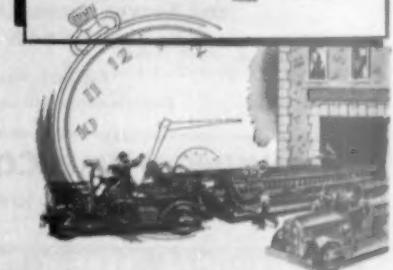
In terms of your own home, or business, the difference between a minor blaze and a great loss can be the Fire Alarm Box on the corner or in your plant.

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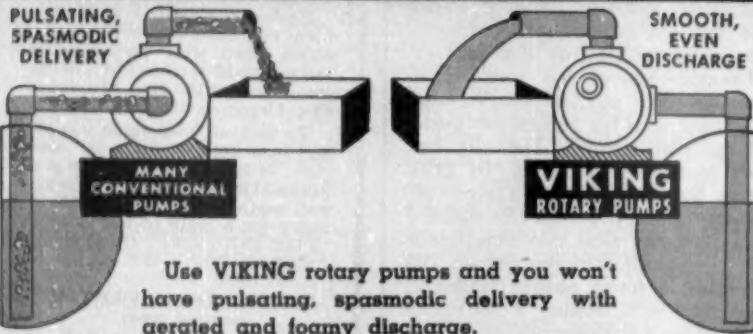
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approach is fairly easy to measure both in vaulting sales volume and continuous physical growth. (Another Harvey motto: "The store that will never know completion.") In 1946, Harvey passed Cain-Sloan's \$7.1-million volume to hit \$7.4-million.

The same year with a \$350,000 RFC loan in his pocket, Harvey spread left by renting the Hitchcock Building with a 60-ft. frontage (picture), and right by taking a lease on the East Building with a frontage of 90 ft. Meanwhile he took over the space occupied by other small street-level stores in the Lebeck Building. In 1950, he bought a building adjoining the back of the store that faced around the corner on Sixth Avenue. The present tenant's lease on this building expires next year.

• Still in There—Today Harvey Co. is the biggest department store in Nashville. But where will it be tomorrow if Harvey loses the case? Harvey would either have to operate on a highly disjointed basis or seek an entirely new location.

How Fred Harvey feels is certain: Painters are calmly applying a fresh coat of lilac to the outside of the store.

## Emerson Gives Details Of Color TV Rent Plan

With the television industry split wide open on how its long-awaited color is going to take in these early stages, Emerson Radio & Phonograph Corp. last week spelled out some of the details on its color set rental plan (BW-Mar. 13 '54, p. 4?).

For the first month, consumers will pay a rental charge of \$200; this includes delivery, installation, and instruction on how the set works. After that, the charge will be \$75 a month, which will cover all service charges as well. Customers may rent the sets for as long as they want, will pay in advance. They can't buy the sets; neither can they apply the rental to the purchase of a set—a fact that raises the question how many takers Emerson will have at this rate.

What Emerson won't tell is how much the dealers—who will rent the sets, too—will have to pay. Its distributors won't rent from the manufacturer, but will act as agents for the factory.

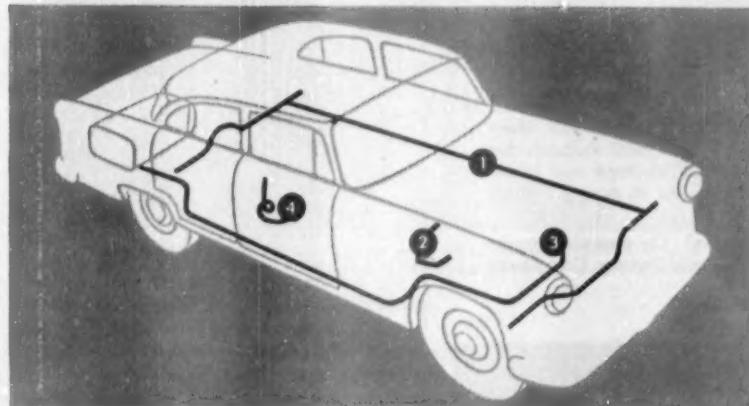
President Benjamin Abrams had said earlier that the public won't pay \$700 to \$1,000 for a color receiver. Some of the other big companies apparently are cutting back production.

Radio Corp. of America believes the consumer hasn't had a chance to say how well he likes the set, and that demand will exceed production this year. Right now RCA estimates 1954 sales at 70,000 sets.



## **WILL YOUR BRAKES WORK, or will he be a bearskin rug ?**

There's every chance in the world your brakes will work. One good reason they will is that your car's manufacturer made the hydraulic brake lines of Bundyweld Tubing. Bundyweld won't leak, collapse from vibration, or burst from high braking pressures. And your brakes won't give out because of brake-line failure.



### **IN 95% OF TODAY'S CARS**

1. Bundyweld is so dependable it's used in 95% of today's cars in an average of twenty applications each. Brake lines are only one of its valuable functions.
2. Oil lines of Bundyweld mean no oil-line leaks for you. No repair bills, delays, annoyances, or ruined engine because your oil mysteriously disappeared.
3. Gasoline lines under your car take day-in, day-out beatings from stones and vibration. They don't leak, don't collapse. They're made of Bundyweld.
4. Foolproof push-button windows are a real pleasure, of course. Car manufacturers help make them foolproof by using Bundyweld Tubing to conduct hydraulic fluid.

## **BUNDYWELD TUBING.**

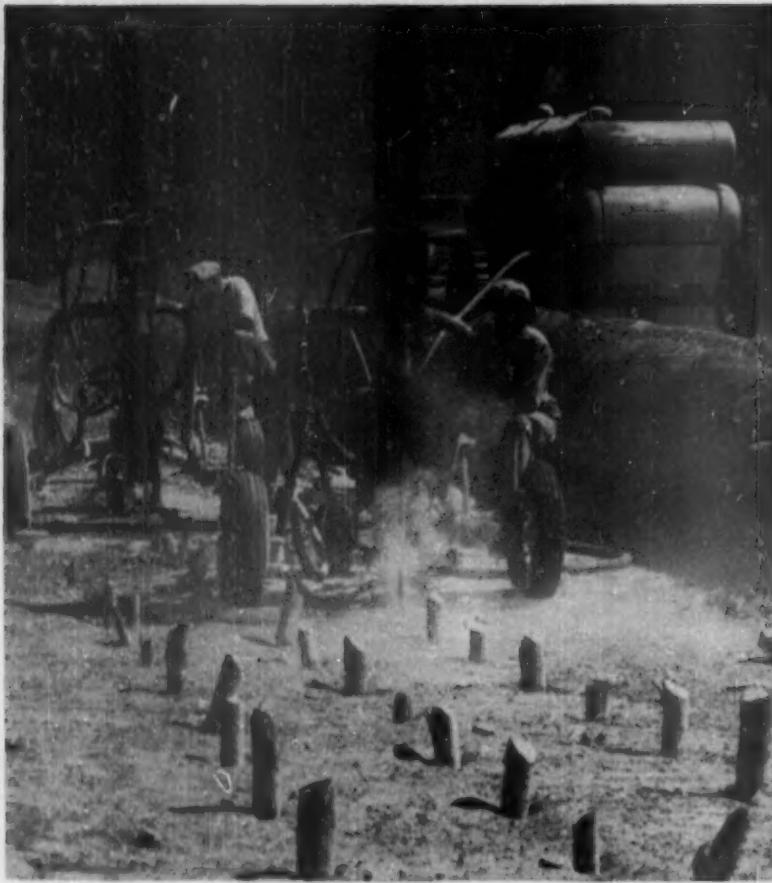
"The lifelines of your car"

BUNDY TUBING COMPANY, DETROIT 14, MICHIGAN



Bundyweld Steel Tubing is the only tubing double-walled from a single metal strip, copper-bonded through 360° of wall contact. It's extra-strong, leak-proof, completely dependable.

## MARKETING BRIEFS



*the contract was a toughie*

### **GARDNER-DENVER**

*came up with a trick or two!*

This contractor planned to follow the slow and laborious way of laying sewer pipe in his community. Thought he'd have to excavate eight feet of clay—drill dynamite holes in the hard limestone underneath—push the clay back in to keep rock from hitting nearby homes when he blasted.

Then his Gardner-Denver salesman suggested two tricks which were simple and inexpensive. As a result, he pushed holes right through the clay and drilled the rock without moving the clay. Trenching and backfilling operations were eliminated—and the contractor is now finishing the job at a good profit.

Need help with your tough rock drilling problems? Or pumping problems? Or compressed air problems? Write Gardner-Denver Company, Quincy, Illinois.

SINCE 1859

### **GARDNER-DENVER**

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FOR CONSTRUCTION, MINING, PETROLEUM AND GENERAL INDUSTRY

**BIGGEST DEPARTMENT STORE** west of Chicago—that's what Seattle's Bon Marche (a unit of Allied Stores Corp.) predicts its upcoming expansion will make it. Four stories are being added to its present four-story downtown store, at a cost of \$3-million. The addition is scheduled to be finished late in 1955.

**WINSTON CIGARETTES**, R. J. Reynolds' new king-size, filter-tip brand, will cost only 2¢ a pack more than its top-selling Camel. Winston will undersell most rival filter brands by from 4¢ to 7¢ a pack. One exception: Brown & Williamson's Viceroy.

**MORE LIBERAL CREDIT TERMS** for farmers who buy Ford tractors are in the offing. Ford's new terms are 25% down, three crop years to pay, plus insurance features that pay off the debt in case the purchaser dies. Ford says usual terms are 40% down and two crop years to pay.

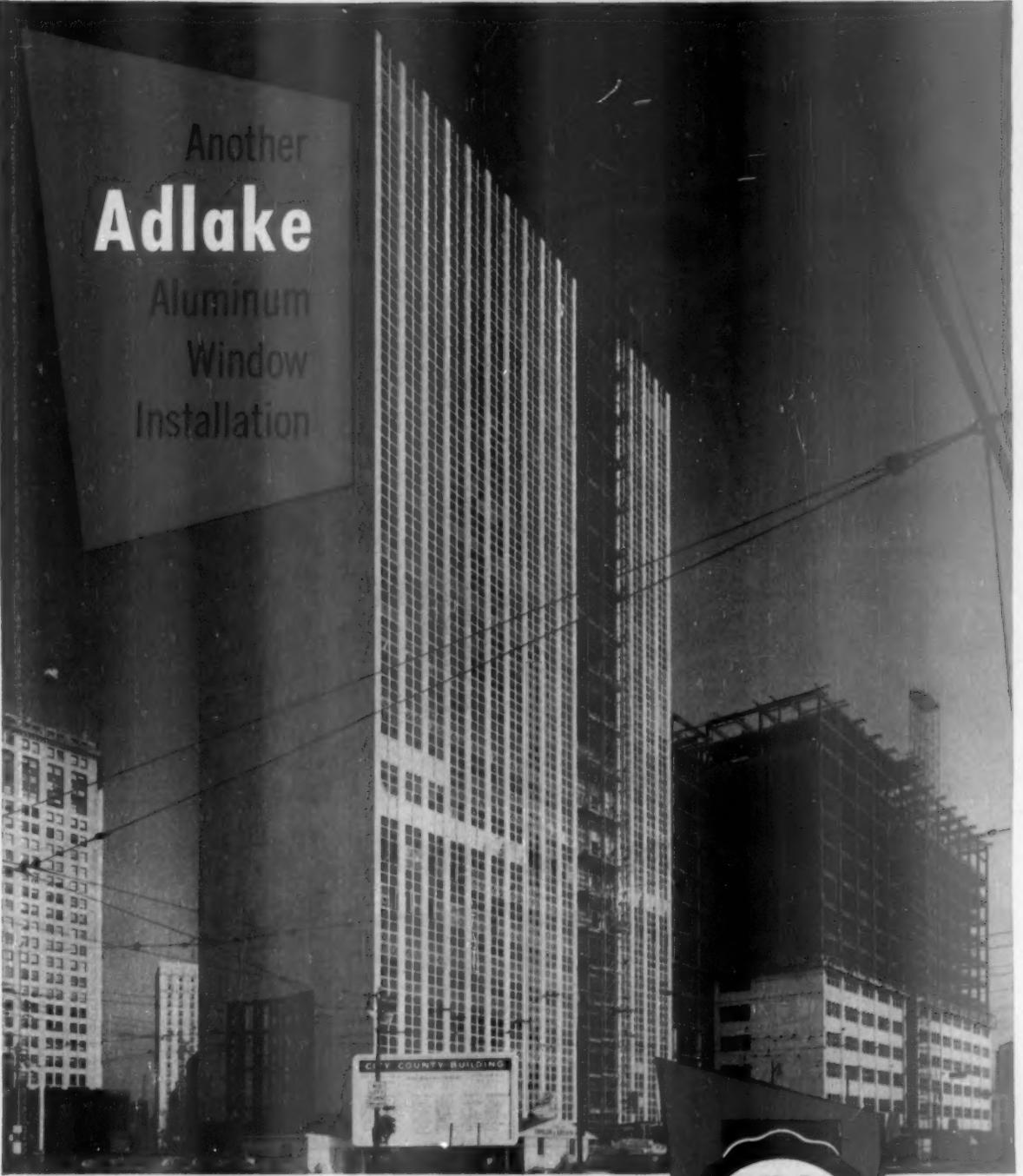
**A LOW-PRICED LIGHTER** is Ronson's newest bid to reverse the sales slump it has been experiencing (BW-Mar. 6 '54, p110). Its new windproof Windlite model will retail for \$3.95, lowest-priced item Ronson has marketed in 20 years. Windlite features a slotted collar to deflect wind, a wick of Fiberglas, and an extra-large fuel container with a removable base.

**ADD SHOPPING CENTERS:** Lincoln Plaza opened for business in Worcester, Mass., with R. H. White, 100-year-old Boston department store, taking the biggest space. . . . Milwaukee gets a big one, called Bay Shore, to open in nearby Glendale, next week. Bay Shore will have between 60 and 70 stores, 100 offices, a bank, postoffice, and parking space for 25,000 cars daily. . . . Bridge-Haven, a \$15-million center, is set for construction on 95 acres midway between Bridgeport and New Haven, Conn.

**NEWSPAPER RACKS** are going into all Nashville buses to offset transit company losses. Racks and slotted coin boxes, next to the driver, will dispense morning and Sunday editions of the Tennessean and evening editions of the Banner. The bus company keeps 2¢ on each 5¢ daily and 3¢ on each 15¢ Sunday paper sold.

**COOK BOOKLET** for men, which uses pictures instead of text recipes, is U.S. Brewers Foundation's newest sales device. The booklet, called How to Keep That Gal in Your Life, features dishes that go well with beer.

Another  
**Adlake**  
Aluminum  
Window  
Installation

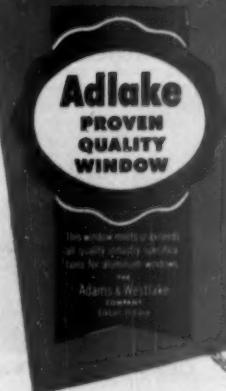


City County Building, Detroit, Michigan—Courts Unit (left) complete and Office Unit (right) under construction. Harley, Ellington & Day, Architects—Bryant & Detwiler, General Contractors.

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- Wool woven-pile weather stripping and exclusive patented serrated guides

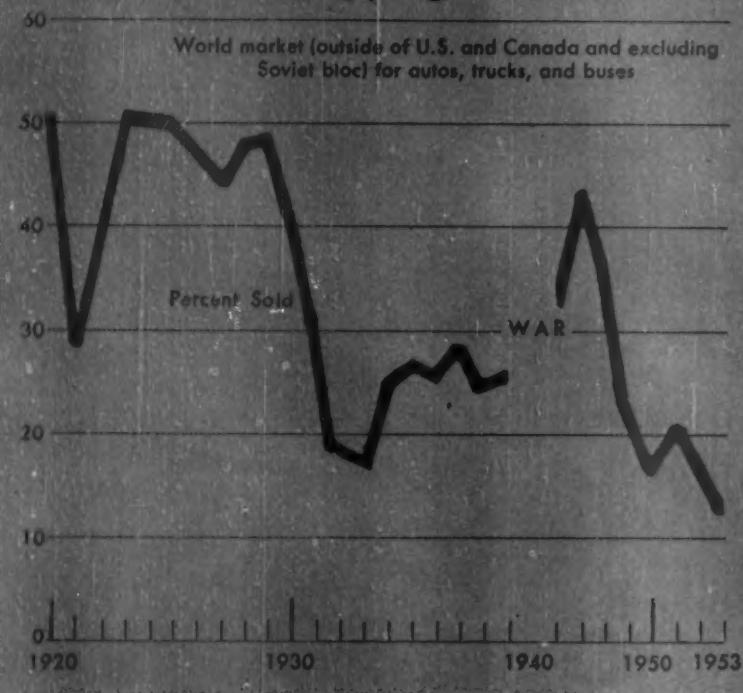
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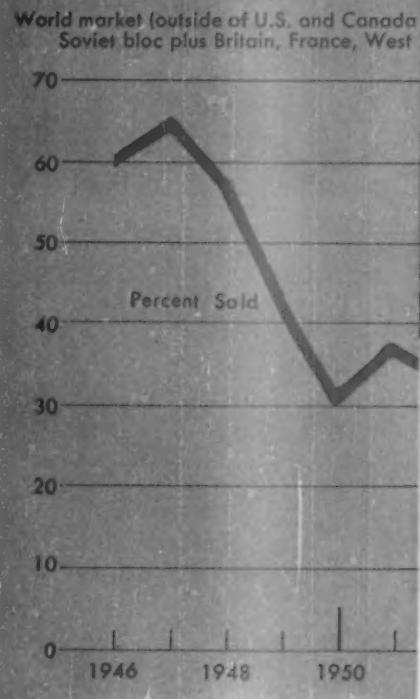


# BUSINESS ABROAD

## In World Markets, U.S.-Canadian Auto Makers Have Been Slipping for Years



## We're Still Slipping— Even in Countries That Don't Produce Cars



## Foreign Cars Give U.S. Exports a Run for Their Money



U.S. AUTOS like the Chevrolet (left) and Ford are losing out in foreign markets to . . .

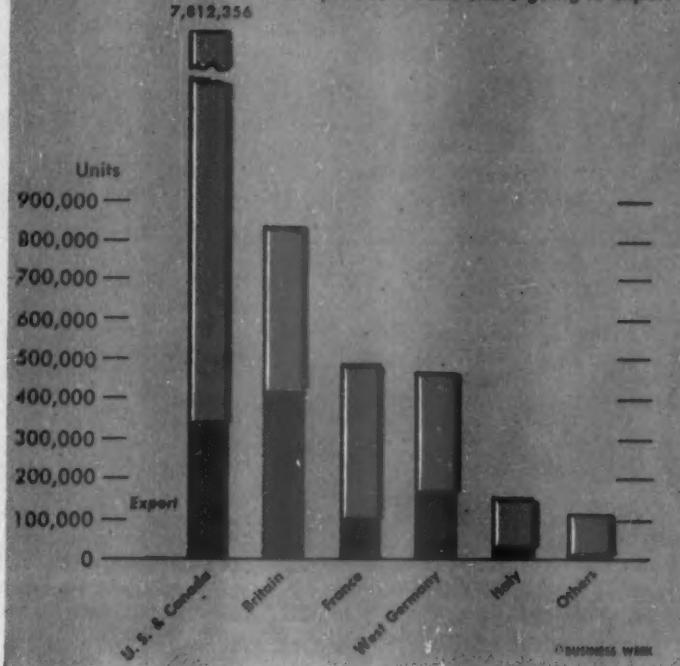


GERMAN-MADE Volkswagen (left) and British Austin A-40, cheaper to buy and to run.

d excluding  
many, Italy)

## So, Even with Our Huge Output, We've Dropped to Second Place in Exports

Total production and share going to export



953

## Run for Their Money

This will be a year of tough competition in the world car market—tougher than any since the end of the war. With the British and Germans battling for every export outlet they can find, U.S. auto manufacturers will do well if they sell as many cars, trucks, and buses abroad in 1954 as they did last year. Some American auto men even figure that foreign sales from the U.S. and Canada (the two countries are treated as one producing unit by the auto makers) might drop off by 5% or more.

The fact is that the U.S.-Canadian industry has two strikes against it in this competitive struggle:

- The dollar shortage will continue to hamper U.S.-Canadian sales in at least half the world markets, cutting down the real potential for American-type cars.

- U.S. industry has priced itself out of many a foreign market by turning "low-priced" cars like the Chevrolet and Ford into luxury automobiles that cost a lot more to buy and operate than

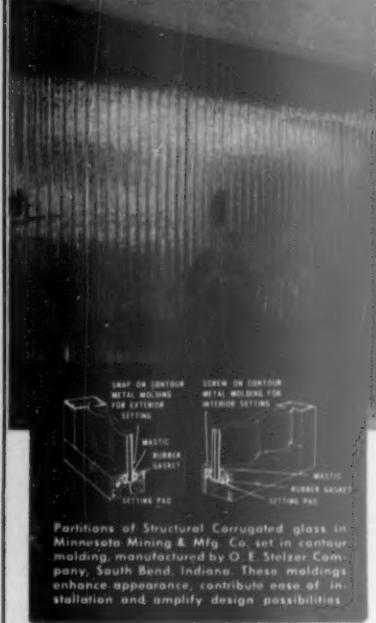
the British and German top sellers—the Austin A-40 and the Volkswagen (pictures, opposite).

- Not a Death Blow—This doesn't mean that the U.S.-Canadian industry is gloomy about the foreign market. Even the pessimists don't expect foreign vehicle sales to drop below \$600-million as against about \$650-million in 1953. For one thing, they expect truck and bus sales, which almost equaled the number of passenger cars exported last year, to hold up and keep the U.S. ahead in this field. On top of that, the U.S. automotive industry as a whole should do a \$400-million business in accessories—spare parts, batteries, tires, etc.

If 1954 total foreign shipments run at this \$1-billion level, our automotive exports will still be well ahead of Britain's in terms of sales value. The British export figure for 1954 won't be above \$700-million—even if Britain's automotive industry sells as many vehicle units as it did last year (414,000, compared to a U.S.-Canadian total of



WALLS BRIGHTEN HALLS



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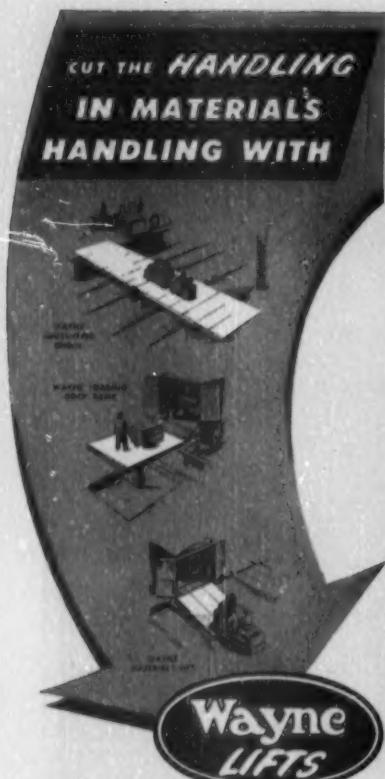
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MARYLAND  
TORONTO,  
CANADA



333,000) and the same volume of accessories as in 1953.

• **Omens**—Still, there's no blinking the fact that in foreign markets the position of the U.S.-Canadian auto industry isn't what it used to be. That goes whether you are looking back to the 1920s when the U.S. dominated the export markets of the world or at the early postwar period when we temporarily regained some of the ground lost during the depression years (charts, pages 130, 131).

Of course, you couldn't expect the U.S. to hold indefinitely the share of the world market that it had in the 1920s. We gained that simply because we were the first country to take the motor car seriously as a means of mass transportation. That gave us a head start in the production and sale of low-priced cars. In time, though, the industrial countries of Western Europe were bound to imitate us. The process got a real fillip during the 1930s when the combined impact of the Hawley-Smoot Tariff and the U.S. Depression led other countries to jack up their tariffs and push toward industrial self-sufficiency. By 1939, Western European countries were producing almost all of the cars they used themselves, whereas in the 1920s they had bought fairly heavily in the U.S. Also they were cutting into our markets in nonmanufacturing countries.

• **Handicaps**—During the early postwar years, especially 1947, the U.S. once more took a commanding position in the world car market. At this time the British, French, and Italian auto industries were struggling to get back on their feet while the German industry was still flat on its back.

For several years after that, U.S. industry was helped by Marshall Plan funds. From 1948 on, the Economic Cooperation Administration and its successor agencies financed shipments of 115,000 vehicles, mostly to Western Europe. Otherwise, the postwar dollar shortage would have pinched U.S. exports even harder.

The dollar shortage, though less acute than two years ago, continues to handicap U.S.-Canadian car exports. It keeps U.S. cars almost completely out of the major countries of Western Europe. Also, it seriously limits our markets in the British Commonwealth and, for the time being at least, has practically shut the markets of countries like Brazil and Argentina. In both cases, there has been a traditional preference for the large, powerful, and comfortable American car.

• **Economic Pattern**—This isn't the only problem that the U.S.-Canadian industry faces abroad. Even in the free markets of Western Europe—countries like Belgium and Switzerland where there are no restrictions on dollar im-

ports—the U.S. now gets only 20% of the business. The rest goes to British, French, German, and Italian auto makers. What's more, there's a growing preference, partly forced by the dollar shortage, in some of the underdeveloped countries for European-type cars.

The wartime redistribution of income plus wartime savings put millions of low-income people in a position to buy a car for the first time—provided the initial cost was not too high and running costs were low. It's this market that continues to grow, whereas the market for American-type cars—which is largely in the middle- and upper-income range—seems to be nearing a saturation point.

It was the British who first took advantage of this changing consumption pattern, though as much by good luck as by good management. Because of the British prewar horsepower tax, which favored the small car, the British auto industry concentrated in the 1930s on building small, economical cars. And even when this tax was dropped after the war, British auto makers stuck to the small car.

• **Competition**—British industry attributes its success in foreign markets to several other things: (1) the dollar shortage and sterling glut in the early postwar years, which gave time to consolidate the British export position; (2) the absence of German exports and the concentration of American auto makers on the domestic market; and (3) the tight rationing of cars to British consumers.

The Germans, who are now Britain's toughest competitors, give the British credit for opening up the world market to European-type cars. The German industry feels it is merely in a process of catching up. Its export goal for this year is an increase of 25% over 1953. If the Germans achieve this, they may be exporting more cars in 1954 than is the U.S., though not so many cars, trucks, and buses combined.

• **Sharing the Boom**—The export figures alone don't tell the full story, of course. Through its plants in Britain and Germany, the U.S.-Canadian auto industry has a share in the British-German export boom. In a sense, our industry is a partner to the very competition it faces abroad. For General Motors and Ford each have big plants in both countries: GM with Vauxhall in Britain and Opel in Germany; and Ford operating under its own name.

Production and export figures for 1953 show how important these American operations are to Britain and Germany. In Britain, the two American companies combined produced roughly 38% of total British output and contributed 35% of British vehicle exports. In Germany, Ford and Opel combined accounted for 31% of output and 40% of exports.



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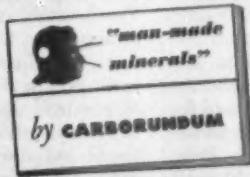
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JEAN MONNET's bid for loan will get sympathetic ear.

## The U.S. May Bolster Coal-Steel Expansion

Jean Monnet, soft-spoken czar of the Schuman Plan, comes to the United States early next month nursing a new ambition. He wants to be the banker to provide a massive stimulus to the European Coal & Steel Community, whose governing body, the High Authority, he heads. All he lacks is some ready cash.

Chances are good that Monnet will get his money. The Eisenhower Administration has already agreed in principle to grant the High Authority a loan, something on the order of \$100-million.

Such a credit to the coal-steel pool would be a unique departure in the history of foreign economic pump-priming. And its political aspects appeal to Washington, as well.

• **Prestige Plus**—Monnet's idea of the loan is to increase the prestige and credit of the coal-steel High Authority, which has wound up its first 18 months of overseeing the coal and steel industries of West Germany, France, Italy, and the Benelux nations. As Monnet sees it, the loan would serve as a catalyst, generating a flow of new private

capital—badly needed to modernize the industries—and bolster the coal-steel pool as the economic foundation of a united Europe.

There's a more immediate political side of the loan, to be sure: It's to encourage the French to ratify the European Defense Community treaty by helping the coal-steel community. The loan, according to Washington officials, would be hard-cash proof that the U.S. is not backing away from its policy of encouraging European integration. It's for this reason that President Eisenhower, Secretary of State Dulles, and congressional foreign affairs leaders are already on record as favoring a loan to the coal-steel community.

The pace of loan negotiations in Washington is likely to be brisk, the atmosphere friendly. Rarely does a money-seeking European statesman come to the U.S. with such a reserve of goodwill and sympathy. Jean Monnet represents the fullest flowering of the philosophy of "Europeanism." Both he and his American hosts know that any perceptible decline in the prestige of the coal-steel pool could have a dis-

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LOAN would act as catalyst to modernization of coal-steel industries.

astrous effect on the future of European unity.

### I. Plight of the Community

The High Authority may not have much cash, but it has a solid income. It operates the only "European tax" in existence—a flat levy of 0.9% of the value of all the coal and steel produced in the six member nations. That will bring in about \$50-million worth of francs, Deutschemarks, guilders, and lire this year. Expenses should be about \$15-million, including special funds to help those producers who have been hurt by the opening of the tariff-free common market. That leaves a tidy sum, which Monnet would like to convert into a capital fund for expansion and modernization.

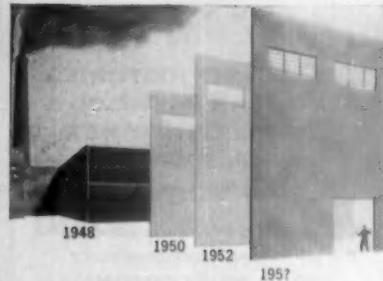
• **Sagging Market**—There's an urgency to Monnet's bid for a loan fund. The High Authority took over a booming industry operating in a sellers' market; fundamental problems facing Europe's coal and steel were masked by short supplies and prices much too good to be true. Last year the reaction came.

The yearend accounting showed that the six nations had in fact produced a little less coal and a little less steel than in 1952. Western Europe began to slip, while production in Britain, the U.S., and the Soviet Union continued to climb (BW—Feb. 20 '54, p152).

The reaction has continued into 1954. Coal and coke stocks are rising, there have been price cuts in steel, and short work weeks are popping up in both industries within the community. Industry leaders tend now to see their problem as markets, not investment funds.

Monnet believes there's more to it than that—and looks to the long-term. Despite considerable investment in postwar years, Europe's coal and steel are high cost. Equipment is old, productivity low; production and transport costs are high. Years of neglect and years of war, cartelization and market fragmentation have produced a cost-structure that is hard to change.

• **Long-Range**—There's no doubt that investment programs now under way will help refurbish the industries. But Monnet also knows that some of these



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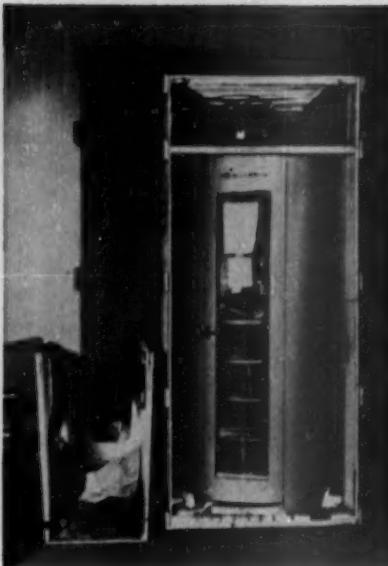
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FROM ATLAS PLYWOOD'S  
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CLINIC**

(Safe-Transit Certified)

A single Atlas Plywood case does the job of two cases previously used . . . greatly increases protection . . . cuts shipping weight 20%

## **THIS CASE WASTED MONEY**

This Bevador cooler\* used to be shipped in two heavy wooden cases — shown here with fronts removed to reveal makeshift blocking methods. Sample was received at Atlas Plywood "Shipping Container Clinic" with foot-long hole in crate bottom. Total gross shipping weight: 1,010 lbs.



## **THIS CASE SAVED MONEY**

In Atlas Plywood's "Shipping Container Clinic", engineers designed a single cleated plywood case to hold both units. Note improved blocking — also that cases are shipped in horizontal position, with skids on bottom and end for easy handling. Cleated plywood virtually eliminates transit damage. Total gross shipping weight: 800 lbs. — 210 lbs. of shipping cost saved.



\*Mfrd. by Jewett Refrigerator Co., Buffalo, N. Y.

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What you pay for shipping includes what you pay for the containers, what you pay for shipping the containers (at the rate for the contents), and what you pay for damages.

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# **Atlas Plywood**

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plans depend on financial resources that, when the time comes, may not be available in the right volume. National budgets, backstopped by U.S. aid, have been able to support coal-steel expansion. That period is over. So, by and large, is the technique whereby Belgium and West Germany financed modernization by granting short-term credits to industry. Meanwhile, Europe's long-term capital markets, battered by war and inflation, are not likely suddenly to revive and meet all prospective needs.

Despite the present slump, High Authority economists believe that demand for coal and steel will increase substantially over the next four years. By 1958, they calculate the coal requirements from European output at 280-million tons (it was just under 250-million tons in 1953), and steel needs at 50-million tons (49-million last year). Neither of these estimates figures on any important increase in exports from the community.

- **Shortages**—Raw material resources are a major problem. When it is operating close to capacity—44-million tons a year—West Europe's steel industry finds itself using every ounce of iron ore it can put its hands on, and importing expensive coking coal from the U.S. To meet 1958 estimates, 17-million more tons of iron ore (25% above 1953) will be needed. The story is much the same for coal and coke. And there are subsidiary problems—like the need for more and improved housing units for miners and steelworkers.

### **II. A Trip to the Bank**

It is investment needs like these that are bringing Jean Monnet to Washington. But he insists he isn't coming as a "planner"—briefcase bulging with specific investment plans and projects. Planning, the High Authority believes, is largely a function of the coal-steel companies themselves, all privately owned save Charbonnages de France, a government-owned coal producer.

Instead, Monnet looks on his fund as a bank of last resort to be used only when other sources of capital are absent. The High Authority's funds will be parceled out on a "European" basis—what's good for the coal-steel community as a whole rather than for any specific business enterprise.

- **Free Hand?**—That's one reason why Monnet is anxious to avoid having Washington tie the loan too closely to specific uses and projects. Italy, a bad banker's risk, might wind up at the hungry corner. Yet a certain Italian development project that didn't meet banker's requirements at first blush might well strengthen the coal-steel community over-all.

In this regard, the U.S. Adminis-

tration will lean over backward. Certainly the money is available—the Mutual Security legislation for two years straight has authorized the Foreign Operations Administration to extend help to the Schuman pool.

• Strings—To justify the loan to Congress, however, the Administration will inevitably tie some precise conditions to the money's use. And certainly the congressmen will want to know something about how the coal-steel community is working in practice—especially in the area of encouraging competition.

As demand for coal and steel has leveled out, some old ogres of the industries have emerged within the new setting of the common market. The coal-steel community treaty has a good many brave words about the restoration of competition and the elimination of cartels. If the community doesn't fulfill at least part of its promises on this score, a number of critics—both in the U.S. and in Europe—will say "I told you so."

• Sticky Points—The High Authority's successes in poking holes in the cartel structure deserve praise. They were gained, however, when the pressure was not heavy. More recently, four sticky problems have come before the Authority:

• Powerful German coal operators, worrying about markets, are marshalling their forces to block the High Authority's plan to disband the six West German coal marketing boards. The coal tycoons want more cartelization—not less (BW-Mar. 13'54, p148).

• Belgian and Dutch producers have been pressing for the elimination of maximum prices for coal, which have tended to become the sole selling price. France and Germany opposed the move. Last week, the Authority took the easy way out, recommended a reduction, but not elimination, of maximum prices.

• France is protesting a recent High Authority ruling on steel prices. Individual producers are now allowed to depart from their selling prices, as registered with the Authority, by an average 2½% above or below. France contends this upsets the basic principle of the pool, which assures one price for all buyers.

• The community's steelmakers have decided to set export prices. They claim that the Authority has the power to prohibit price fixing within the six nations, but not outside. The national governments haven't seen fit to clamp down on the producers. The High Authority, while it sees a fundamental challenge to the concept of competition, has so far limited itself to hemming and hawing. When it finally makes a decision—to fight or to capitulate—you'll get an inkling of the future character of the coal-steel community.

## Wooing Egypt

East Germans put on industrial exhibit in Cairo . . . Mexico aims to fill own needs for lubricants.

In an obvious move to undercut thriving West German trade in the Middle East, East Germany is putting on a lavish industrial exhibition in Egypt. A 170-man team of East German scientists and technicians has finished installing over \$3-million worth of machine tools, electrical equipment, textile machinery, and medical accessories on well-planned fair grounds in Cairo.

To herald the event, the Reds spent \$100,000 on newspaper promotion in Cairo and Beirut—a lot of money by Middle East standards. On the eve of the fair's opening—by President Mohammed Naguib—the East Germans put on a \$30,000 fireworks and confetti show.

Fair organizers boast that they can not only deliver any of the types of machinery on display but also that they can equip such projects as a cement factory, a rolling mill, a tobacco plant, and a canning plant, models of which are on exhibition.

East German spokesmen say the fair is aimed at expanding the Middle East business that got a start last year with small trade agreements between the Soviet-zone Germans and Lebanon and Egypt. Since then, the East Germans have been struggling to cut in on the West German business in the Arab world. They have secured a first advantage: Cairo refused to O.K. a West German trade show because of the Bonn government's decision to pay Israel \$800-million in reparations despite Arab protests.

## Mexican Lubricants

U.S. oil companies already doing only a trickle of business in Mexico—mainly in lubricants and gasoline that Mexico's own output can't provide—may lose a good share of even that market next August. That's when Mexico's new \$26-million lubricant plant at Salamanca is scheduled to go into operation, turning out some 2,000 bbl. a day of lubricating oils, greases, and paraffins. It will make Mexico self-sufficient in lubricants.

To assure a domestic market for its output, Mexico is expected to ban imports of lubricants or impose a stiff tariff. When that happens, U.S. oil companies stand to lose a \$10-million-a-year export business.

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Brazil's debts to U.S. exporters are piling up again, after a previous big backlog was paid off last year with a \$300-million loan from the Export-Import Bank. Of Brazilian purchases made in the first weeks of a new exchange controls plan (BW-Oct. 24 '53, p150), three out of four are already past the 90-day repayment date.

The British Industries Fair, set for May, will draw a good crowd, according to early signs. Sponsors of the annual BIF say that 3,000 buyers from 87 countries have already indicated they will attend. That's 20% ahead of last year's early acceptances. But British exhibitors will be less numerous this year, with chemical and plastics makers among the missing.

Daimler-Benz Co., West German auto maker, will help India's Tata Locomotive & Engineering Co., Ltd., set up a plant to assemble, and later manufacture, trucks. The Stuttgart company will provide capital and technical assistance.

Exports of Czech hats to the U.S. are being checked for dumping by the Customs Bureau. U.S. hat makers have charged that hats made in Czechoslovakia have been imported into this country at below production cost.

The Ankara office of the International Bank for Reconstruction & Development has been closed by the Turkish government in a dispute over economic policy. The World Bank had refused to add to the \$60-million already lent to Turkey, unless the Turks took steps to curb their mounting trade deficit. Last year, Turkish imports topped exports by \$125-million.

Mexico City will buy 1,000 buses in the U.S. to bolster its hard-pressed transportation system. Last year the city government spent \$1.2-million for 90 trolley cars.

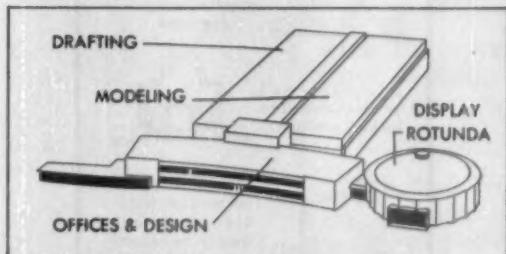
Japan's Fuji Automobile Co. has concluded a 10-year deal with the U.S. Continental Motors Corp. to manufacture Continental's engines for sale in the Far East.

U.S. exports in 1953 totaled \$21.3-billion, including \$4.3-billion in military aid furnished by U.S. abroad. Imports last year amounted to \$16.6-billion. Excluding the military aid sum, U.S. exports topped imports by only \$400-million, the smallest in any postwar year. In 1952, this excess stood at \$2.3-billion.



Advanced Styling Section of Ford Motor Company's new \$11.5 million Styling Building, Dearborn, Michigan.

## Ford "dream shop" has built-in climate!



The design-office wing and display rotunda are served by a central system. It includes: 7 supply fans; 34 exhaust fans; heating and cooling coils and sprayed-coil dehumidifiers—all furnished by American Blower.



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This "dream shop" at the Ford Engineering Staff's Advanced Styling Section is just one of many styling areas which depend on clean, conditioned air.

For example, in 12 roomy studios clay-modeling teams work under lights which produce shadowless illumination—and intense heat! To absorb this heat and provide the proper climate for working with clay models, specially designed air-conditioning systems were installed for each studio and drafting room. American Blower Air Handling and Air-Conditioning Equipment was used for this unusual assignment.

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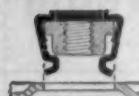


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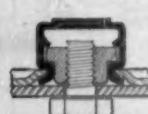
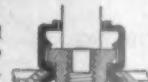
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# INTERNATIONAL OUTLOOK

BUSINESS WEEK

MAR. 27, 1954

Indo-China will be the decisive issue at Geneva.

With the battle of Dienbienphu, the Indo-Chinese war has reached a point where East and West must agree to start truce talks or else face the possibility of a big Asian war.



For the U.S., a French defeat at Dienbienphu isn't the only danger.

Suppose you get a stalemate in that battle. Then at Geneva the Communists offer a peace proposal that no French government could refuse:

- Limiting truce talks to the French and Ho-Chi-minh.
- An Indo-Chinese federation, to be governed by a coalition.
- A link to the French Union—if the French army withdraws.

This kind of settlement would leave Indo-China open to Red control.

But to get better terms, the U.S. might have to agree to let Red China into the U.N. and that seems out of the question.

In London the eight world oil companies have just about agreed on how to handle Iranian oil—and what proposals to make to the Iranians.

A few of the details:

(1) Anglo-Iranian Oil Co. has agreed to come down to a 40% share in the consortium that will market the oil.

(2) Iran won't be offered anything other Arab oil producers haven't got—to avoid hard feelings and trouble in other Middle East nations.

(3) The companies will ask for guarantees as to quantity and quality of oil from the Iranians. In practice, this means virtual control of production. And that's likely to be the thorniest question to be reconciled.

This week brought two signs of London's slow-but-sure comeback as a center of international trade and finance: (1) reopening of the gold market and (2) easing of some restrictions on the pound.

Neither of these moves makes sterling any more convertible into dollars. But they relax restrictions that now make convertibility impossible.

Almost as if nothing had happened, the London gold market is back in business after 15 years. The same six men, representing top brokers, refiners, bankers, met this week in the same room at Rothschilds to set the gold price (a shade over the U.S. floor price of \$35 an oz.).

Business is brisk as traders return to the London market, world's largest before the Bank of England took over all gold dealings in 1939.

The biggest fillip for the market came with South Africa's decision to sell its newly mined gold in London. In the past, South Africa has sold part of its gold on premium markets in Paris and elsewhere (BW—Dec. 12 '53, p152).

But South African gold coming to London won't decisively increase the sterling area's reserves—and thus bring convertibility closer.

Sterling area citizens still aren't allowed to buy gold, which would be,

# INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK  
MAR. 27, 1954

in effect, convertibility. And Britain will have to pay for incoming gold in what amounts to dollars.

But the refining, insurance, freight, and banking profits stay in Britain. They'll be important if the market regains its prewar size.

As the gold market reopened, London lifted some of the curbs that hobbled sterling's use in world trade.

What's been done is to allow freer use of sterling for trade and payments among nations outside the sterling and dollar areas.

To be sure, that doesn't mean convertibility—the gulf between the world of sterling and the world of the dollar still exists.

The British move does boost sterling's stock as an international currency—it already finances nearly half the world's trade. And in a technical sense it paves the way for convertibility.

—•—  
The Italian government is getting set for a showdown with the Communists.

Premier Scelba knows that democracy doesn't have a chance in Italy unless he meets the Communist challenge head on.

He is planning to (1) push a social reform program; and (2) cut the Reds down to size.

For the long pull, communism can only be beaten in Italy if the average man gets a better break. So Scelba has a program that includes a stricter system of tax collection, higher wages for industrial workers, and a speed-up of land redistribution.

For the short run, though, Scelba is counting on a crackdown to weaken the Communist position. He plans to:

- Stop the printing of "Unita," leading Communist newspaper, in a government printing plant. (This has been going on since 1945.)
- Cut off the share of profits that the Communist party now gets from all trade deals between Italy and Soviet bloc countries.
- Fire all Communist workers from Italian plants that have offshore-procurement contracts from the U.S.

—•—

British-Soviet trade is growing—but not so fast as the Churchill government would like. Recent Russian orders (firm ones) for British goods now total \$56-million, with about \$40-million already approved as nonstrategic.

By British standards, this is small potatoes. So the government would be willing any time to close a formal, over-all trade deal with Moscow.

It's not just in Britain that Moscow's new trade policy could have an important impact on the business outlook. The same could happen here—through commodity prices.

Because of the economic squeeze in Russia and the satellites, Communist buyers are bidding heavily for a number of items, especially copper and lead.

Today Wall Streeters figure that this is a real factor in holding up commodity prices.



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**LOCAL BUSINESS**

**Olympia Brings 'em Back**

**OLYMPIA**—Olympia is a pleasant little city of about 17,000, located at the southern tip of Puget Sound. It is also Washington's state capital, and its only important industry is government.

Like most state capitals, Olympia has several imposing buildings, which house the legislature, the supreme court, and the major state departments. But in recent years office space has become tighter. Many new state commissions and boards set up over the years have had to locate in some other city—usually Seattle, Washington's largest city, 60 miles north of here. A few older agencies even moved from Olympia to Seattle.

Olympia businessmen have been feeling more and more unhappy over this trend. Some have been worried that Olympia would eventually become a capital in name only, with all major governmental functions elsewhere. As long as the lack of space persisted, however, there was little they could do.

But early this year the state opened a brand-new office building here. And local businessmen, seeing their opportunity, went to court to compel all state agencies with head offices in other cities to return to Olympia and stay here.

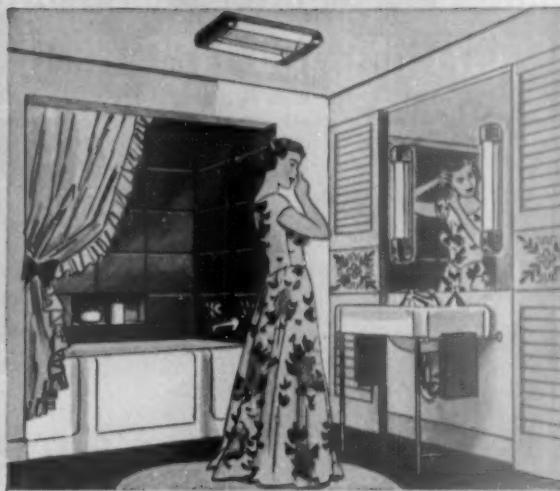
Last week, Superior Court Judge Charles Wright agreed with them, ordered 13 agencies now headquartered in Seattle to return here. Judge Wright held that the provision of the state constitution that designates Olympia as the capital requires such centralization. Attorney General Don Eastvold is appealing to the state supreme court.

**Tunnel Tug of War**

**DETROIT**—The mile-long vehicular tunnel under the Detroit River, which connects this city with Windsor, Ont., is for sale. But because of feuding between the city (Detroit) and the county (Wayne), it probably won't be sold for at least a year.

The tunnel was built in 1929, at a cost of about \$20-million. It didn't do too well in the Depression, and in 1936 went through bankruptcy and reorganization, recapitalizing at \$6½-million. Since then it has been making good money and paying good dividends. Now the owner, Detroit & Canada Tunnel Corp., would like to sell, for \$18-million. And the Port of Detroit Commission, a public authority under control of Wayne County, would like to buy. Last month the commission took an option on the tunnel. It planned to raise the money by selling revenue

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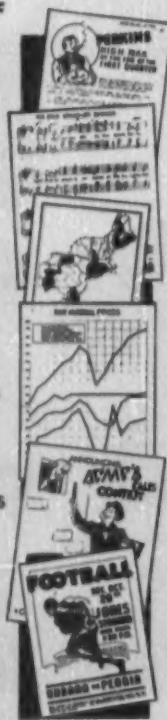
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bonds, and to use any excess revenues to finance port improvements.

But the tunnel's original charter provided that Detroit and Windsor, jointly, could recapture the tunnel any time after 1950, and that the recapture price declines after that until, in 1990, the tunnel goes to the cities for nothing. The city wants the tunnel, but it hasn't the money to exercise the recapture clause now. But the city fathers still don't like to see all that revenue go to the county. So when the Port Commission asked the legislature for the needed O.K. to pick up its option, the city opposed, loudly. As a result, the bill died a quiet death in committee; it can't be brought up again until 1955.

### Oahu Joyride

**HONOLULU**—Honolulu Rapid Transit Co. has come up with what it believes is a new answer to a decline in business: It is carrying sightseers.

Even worse than most mainland transit companies, HRT has been hit by city decentralization, higher costs, and increased use of private autos. Its traffic has dropped fully 50% in the past seven years. So it applied to the Public Utilities Commission for permission to operate sightseeing tours around the island of Oahu (about 100 mi.) for \$3 per person plus tax.

Independent taxi operators and Gray Line Hawaii, which operates sightseeing buses, fought the move. But the commission ruled that the law did not require it to consider the interests of any nonregulated carrier in acting on the petition of a regulated transit company. Since Gray Line and the cab operators, said the commission, "have not and do not now seek the status of regulated public carriers . . . they are not entitled to seek the protection that public carriers are afforded." The commission issued the certificate, and the taxi owners' attorney has appealed to the Territorial Supreme Court.

### Update

**NEW YORK CITY**—Even the ponderous machinery of state government can move fast in an emergency. On Monday of last week the New Jersey Supreme Court held that the Port of New York Authority did not have the legal right to build a third tube for its Lincoln Tunnel under the Hudson River (BW-Mar.20'54,p174). Before the end of the week, the New York legislature passed a bill embodying the necessary authority. The New Jersey legislature convened this week after a recess, adopted a companion bill on Monday as its first order of business. By Tuesday night, both governors had signed; the Port Authority resumed digging Wednesday morning.



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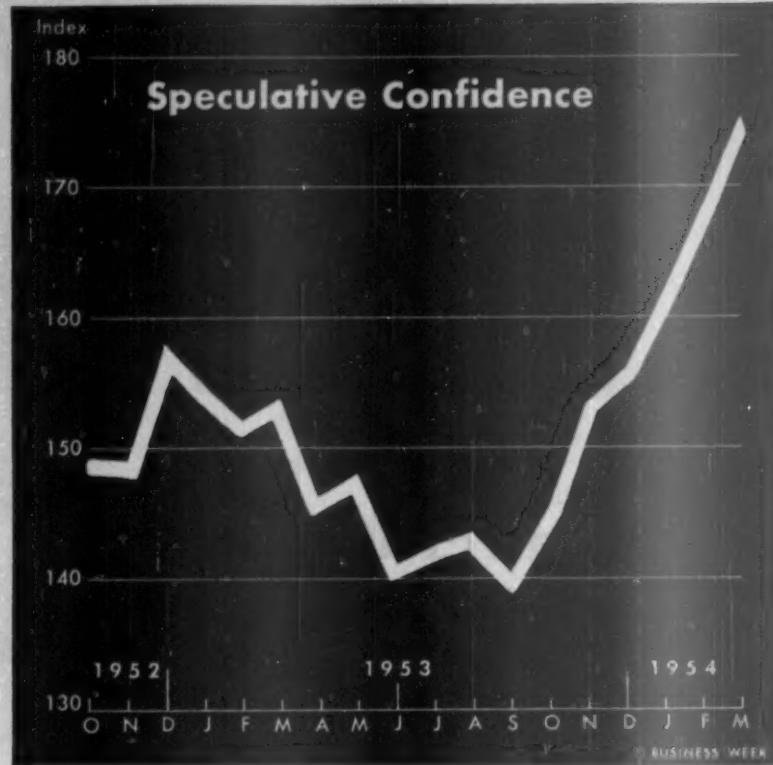
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# THE MARKETS



## Blue Chips Still Chipper

The stock market continues to ignore the current decline in business. The blue chips in particular have been moving to progressively higher ground on selective investment buying, despite slower turning wheels in the nation's factories.

One result is the continued upsweep since last fall in BUSINESS WEEK's index of speculative confidence (chart, above).

The index is a trend line based on the ratio of Standard & Poor's 90-stock daily price index to BUSINESS WEEK's own weekly index of business activity.

The 90-stock index, moving steadily upward since last fall, now stands at around 210.2 (1926 = 100), contrasted with 184.8 last September, a rise of 13.8%.

The BUSINESS WEEK index, on the other hand, has declined from around 135.5 last July, the 1953 high point, to 120 at present, a drop of 11.4%.

• **Two Schools**—The strength in Big Board shares—as measured by S&P's index—indicates to many traders that investors believe that stock prices haven't been fully reflecting the outlook for sales, earnings, and dividends.

Some Street veterans who still think

that the stock market often predicts trends say that the market strength indicates that the present drop in industrial activity will be shorter than many expect.

Others are less bullish. They point out that since last fall the stock market hasn't risen so sharply as the 90-stock index indicates. The index is made up primarily of blue chip or near blue chip issues that have been gaining in recent selective buying while the run-of-the-mine stocks have been idling (BW-Mar. 20 '54, p172).

The bears, in fact, contend that with steel operations down to 66.5% of capacity, with weekly carloadings running upward of 10% behind last year, and retail trade dipping, the stock market sooner or later must fall in line.

• **Reservations**—Such pros as Moody's and Standard & Poor's are neither so bullish as many in Wall Street, nor so bearish as others.

Each of them seems to have some reservations. For example, Standard & Poor's said this week:

"An extension of the advance could well develop. However, in view of the extent of gains already registered, we

would not add to holdings if you already have sizable commitments in recommended issues."

## "Favorite 50" of Trusts Still on Seesaw

Investment trust holdings of common stocks are still doing a lot of shifting about. That's the gist of Vickers Bros., latest compilation of the "favorite 50" stocks of over 175 closed- and open-end trusts with more than \$5.5-billion of investable assets.

Some of the most striking changes: Du Pont jumped from 14th in December 1952 to second place last December; United Gas catapulted from 24th last summer to 14th at yearend;

And Moody's suggests that "investors avoid speculative issues . . . and keep a buying reserve."

in the same period Southern Pacific slumped from 18th to 40th, and Chrysler and three others left the list.

Most popular issue was General Electric, held by 76 trusts. Union Carbide and Westinghouse were close behind, with 73 trusts owning shares in each.

Utilities, chemicals, and tobacco shares showed the widest industry gains among the top 50 stocks, while the biggest drops appeared in automobiles, and in metals and mining.

Rank by Market Value	#				Market Value (Millions)	Trusts Owning Shares	Shares Held (Thousands)	% of Issue Held
	Dec. 31, 1951	Dec. 31, 1952	June 30, 1953	Dec. 31, 1953				
1	1	1	1	Amerada Petroleum.....	\$81.6	31	495	15.68%
15	14	5	2	E. I. du Pont de Nemours.....	52.8	72	492	1.08
9	6	6	3	General Electric.....	52.6	76	601	2.08
5	4	4	4	International Paper.....	49.4	62	878	8.97
2	2	2	5	Standard Oil (N. J.).....	48.1	72	668	1.10
6	8	8	6	Texas Co.....	40.4	55	701	2.55
7	5	7	7	B. F. Goodrich.....	40.4	49	525	12.54
4	3	3	8	Continental Oil.....	39.0	64	749	7.69
10	9	9	9	Standard Oil (Cal.).....	36.8	60	696	2.43
12	12	13	10	Union Carbide & Carbon.....	36.5	73	491	1.70
14	11	12	11	Westinghouse Electric.....	35.6	73	699	4.43
3	7	10	12	Gulf Oil.....	35.2	57	762	3.07
31	10	11	13	General Motors.....	33.4	67	561	0.64
20	19	24	14	United Gas.....	30.8	53	1101	8.54
—	26	23	15	General Public Utilities.....	29.2	49	1006	11.05
8	13	14	16	Kennecott Copper.....	28.7	60	447	4.13
42	18	15	17	Atchison, Topeka & Santa Fe.....	28.3	46	301	6.20
46	33	21	18	Shell Oil.....	28.1	46	366	2.66
21	21	22	19	Sears, Roebuck.....	25.3	37	409	1.69
27	27	20	20	Aluminium Ltd.....	25.2	48	522	5.79
16	15	16	21	Phillips Petroleum.....	25.1	61	469	3.22
40	32	27	22	Int'l Business Machines.....	24.6	31	99	3.03
13	17	26	23	Dow Chemical.....	24.3	50	637	2.81
50	—	33	24	National Lead.....	24.3	39	630	5.53
29	23	19	25	Middle South Utilities.....	24.0	50	890	12.50
35	35	37	26	Central & Southwest Corp.....	23.7	55	1010	11.10
22	24	29	27	Bethlehem Steel.....	23.6	48	473	4.93
36	30	32	28	Niagara Mohawk Power.....	23.3	59	838	7.25
—	48	39	29	Texas Utilities Co.....	22.7	33	470	8.32
49	—	40	30	Ohio Oil Co. (Ohio).....	22.5	54	418	6.37
44	41	31	31	American Tel. & Tel.....	22.2	47	142	0.34
34	28	28	32	Socony-Vacuum Oil.....	22.1	56	622	1.78
26	25	38	33	American Gas & Electric.....	21.5	44	621	4.84
—	46	17	34	American Tobacco Co.....	21.4	39	348	5.38
41	31	36	35	Panhandle Eastern P. L.....	21.3	30	305	9.02
11	29	25	36	Monsanto Chemical.....	21.1	47	256	4.87
—	44	41	37	Southern Co.....	20.7	41	1285	7.10
—	50	45	38	Goodyear Tire & Rubber.....	20.0	34	371	8.21
—	—	34	39	R. J. Reynolds Tobacco.....	19.9	34	504	5.36
33	20	18	40	Southern Pacific.....	19.8	41	540	5.96
—	42	35	41	Seaboard Air Line R. R.....	18.9	33	440	18.04
18	22	30	42	Standard Oil (Ind.).....	18.8	35	274	1.78
—	34	42	43	Firestone T. & R.....	18.4	26	283	7.18
—	—	44	44	Louisiana Land & Exploration.....	18.1	24	352	11.84
—	—	50	45	American Can Co.....	17.6	34	445	4.09
—	—	46	46	Minnesota Mining & Mfg.....	17.5	32	301	3.06
—	—	49	47	Consolidated Edison (N. Y.).....	17.3	34	422	3.10
—	—	48	48	American Natural Gas.....	17.0	39	417	11.33
—	—	49	49	Allied Chemical & Dye.....	16.8	28	229	2.59
—	38	46	50	Illinois Central R. R.....	16.8	24	219	16.12

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# States Swing More Weight

- Under Eisenhower, union leaders see increasing pressure to adopt laws curbing organized labor.
- Labor policymaking seems to be trickling back to the states. Unions are getting ready to lobby in 48 capitols instead of just in Washington.
- Unions haven't been hurt much so far. But they're looking ahead to legislative sessions in '55.

Militant labor unions are alerting members to the need for watching state legislatures as closely as Congress. They are still keeping an eye on Washington and the Taft-Hartley act, but they see the states as the source of the biggest and newest threats to organized labor.

Partly it comes from Administration policy to turn more labor policy back to the states; partly it comes from union curbers' discovery that organized labor is vulnerable at the state level. As long as federal laws were blazing new trails in behalf of labor, state laws didn't matter so much. Now the climate has changed.

• **Campaign by Big Business?**—A few weeks ago, John L. Lewis and his United Mine Workers trumpeted a warning of "a campaign by big business to split organized labor into 48 different segments, each one shackled by a union-busting state law."

And the International Assn. of Machinists (AFL) warned that unionists "had better pay just as much attention to their legislatures as they do to . . . Congress." IAM charged that "business groups in many states are trying to get legislatures to pass antilabor laws."

• **Political Shift**—Union leaders call attention to President Eisenhower's January message to Congress, which mentioned a "need for clarification of jurisdiction between the federal and the state and territorial governments in the labor-management field." By itself, that isn't conclusive. But in the light of the Administration's states' rights position, unions read it as a suggestion to give states more leeway on labor lawmaking.

Since January, unions have become more than ever convinced that their initial interpretation was right. They are girding themselves on Capitol Hill for a joust against expected White House recommendations that:

• States be given the right to enact and enforce any laws that do not take away rights guaranteed workers and employers under the Taft-Hartley act.

• They be authorized also to act, at their discretion, against union activities that create state emergencies.

• **Even More Extreme**—These proposals—which could easily get lost in the futile seething over T-H changes this year (BW-Jan. 30 '54, p128)—are tame compared with recommendations by two southwestern congressmen. Sen. Barry Goldwater (R., Ariz.) and Rep. Wingate Lucas (D., Tex.) want to amend T-H to provide that "nothing in [the] act shall be construed to nullify the power of any state or territory to regulate or qualify the right of employees to picket or strike."

However, the White House suggestions would unquestionably restore the state curbs against picketing and strikes that federal courts have knocked out. Perhaps more importantly, in labor's eyes, the proposals would give the states broad powers to enact restrictive laws, and possibly encourage them to do so.

• **In the Lobbies**—That's why unions are getting set to expend more political energy—and political money—on state campaigns this year.

The tip-off, if one is needed, isn't only in the increased attention being paid to the states in the labor press. As members of 15 legislatures in session this year can attest, unions are busy in state capitols this year; they are also doing spadework (along with management groups) in 44 states where legislatures are scheduled next year.

Their interest now seems to be concentrated mainly on three issues: unemployment compensation, "right to work" restrictions, and guarantees of fair employment practices.

• **Jobless Pay**—Of the three, labor's interest apparently turns first to hiking present levels of unemployment pay.

With unemployment rising, this is a red-hot, vote-pulling issue—one that can be pitched to all wage earners, union members or not.

So far this year, unions have strongly supported proposals to liberalize jobless-pay laws in five states: Virginia, where the legislature upped maximum benefits from \$22 to \$24 a week; New York, New Jersey, Rhode Island, and Michigan. In other states, unions are criticizing "delay, indecision, and reaction" for hampering "needed" improvements in unemployment insurance programs.

• **Exhibit A**—What this can mean politically is indicated in Michigan. The Republican-controlled legislature shied away from jobless-pay improvements proposed by labor-supported Democratic Gov. Mennen Williams—and ran smack into a pile of political troubles.

Gov. Williams, strongly backed by the United Auto Workers (CIO) and other unions, wants a number of changes in Michigan's unemployment-compensation law—including one that would raise the weekly maximum to about 50% of the average weekly industrial wage in the state.

When the legislature showed no signs of giving him anything like what he asked for, Williams pulled what might turn out to be the trick of the year: He told the legislature that unless it votes substantial jobless-pay improvements, he will put his proposals on the ballot in November as a constitutional amendment. Everybody concedes he can do it; with UAW's help, the necessary 286,000 signatures wouldn't be hard to get. Everybody agrees, too, that the amendment proposal would be political dynamite this fall.

• **Right to Work**—One state, Mississippi, has adopted a "right to work" law this year—the 15th to do so. South Carolina is moving toward almost certain final approval of such a law, banning the union shop and all other forms of compulsory unionism. In Kentucky, though, a similar proposal was bottled up when labor protested vigorously.

Virginia has adopted an amendment tightening its law—by extending the coverage to "understandings and practices" under which compulsory unionism continues, foes say, despite present bars against union-shop clauses in labor contracts.

In other states, where legislatures are not in session, unions are campaigning already for legislators willing to repeal

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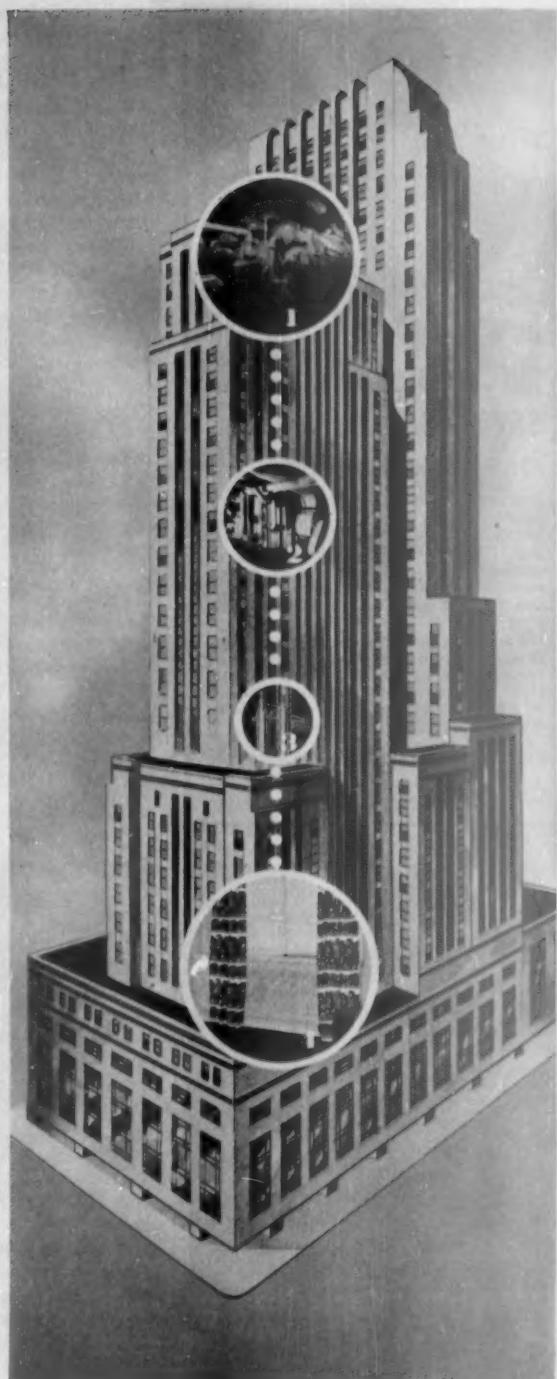
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"antilabor" laws (as in Alabama and Arkansas) or to oppose the extension of restrictive legislation in 1955 (as in Iowa and Illinois).

• **Fair Employment**—Despite a lot of labor talk nationally about the need for new and binding fair employment practice laws, only one legislature—Michigan's—has an FEP proposal in the works this year.

There's a reason, though. Most of the legislatures in session this year are in states that either have laws already barring job bias or are in the South where traditional racial policies preclude consideration of the issue. However, FEP looms as a major issue for 1955, when 44 legislatures will meet.

• **Compensation Policies**—Unions have also put their weight behind legislative proposals for liberalized workmen's compensation laws in a number of states, including Massachusetts, Michigan, New Jersey, New York, Rhode Island, and Virginia. In Michigan, laborites hailed compensation insurance as "second only to unemployment insurance in cushioning the economy."

At the same time, in Arizona, Massachusetts, and Michigan, unions have called for laws to provide cash benefits to wage earners who are unable to work

because of nonoccupational illness or disability.

Workmen's compensation increases appear imminent in a number of states, but the proposals for sickness disability benefits seem doomed to die in legislatures this year—as in other sessions since 1949, the last year in which such a program was written into law. Rhode Island, New Jersey, New York, and California are the only states in which programs are now in effect. New York's legislature voted this year to boost maximum benefits for 5-million covered workers from \$30 to \$33 a week.

• **The Score**—Otherwise, as in 1953, most labor legislating this year has been of a routine nature. On the "plus" side for labor are laws dealing with such things as increased minimum pay, industrial safety, and improved work conditions.

Just as this year, labor was worried in 1953 about the prospect of a rash of new restrictive legislation. On the year's big issue—"right to work" proposals—unions came out way ahead: 14 legislatures refused to outlaw compulsory unionism, and only Alabama passed a "right to work" law after a nip-and-tuck fight nearly defeated it.

## Labor's Hit-Run Tactics . . .

... are "beyond pale of proper strike activities," NLRB rules. Decision crimps "quickie" walkout strategy.

"Hit and run" strikes—sporadic walkouts called to throw an employer's operations into confusion—are "a form of economic warfare entirely beyond the pale of proper strike activities," the National Labor Relations Board ruled last week. NLRB said "hit and run" strikers and all who respect their picket lines can be fired.

NLRB's decision applies principally to the telephone industry—in which "hit and run" walkouts are a common union strategy. However, it also puts a crimp in "quickie" strike activities used from time to time in industrial plants.

• **Wires Crossed**—During a strike in 1952, the Communications Workers of America (CIO) called a series of sporadic stoppages at 200 offices of the Pacific Telephone & Telegraph Co. According to NLRB, CWA admitted the strategy was "deliberately calculated . . . to harass the company into a state of confusion."

Members of the independent Order of Repeatermen & Toll Testboardmen refused to pass through CWA's "hit and run" picket lines. In retaliation, the company delayed putting them back to work after CWA pickets were withdrawn. ORTT charged a lockout,

and asked NLRB to order the company to pay 183 employees for the time they were kept off the job.

An NLRB trial examiner ordered the back pay be given, but the board—in a 3-to-1 decision—upset this ruling. It said (1) the "hit and run" method "sets this strike apart from . . . protected union activity" under the Taft-Hartley act, and (2) the ORTT "joined in the unprotected strike" fully aware "of its planned intermittent and hit-and-run aspects," and therefore cannot now claim the protection of the T-H act.

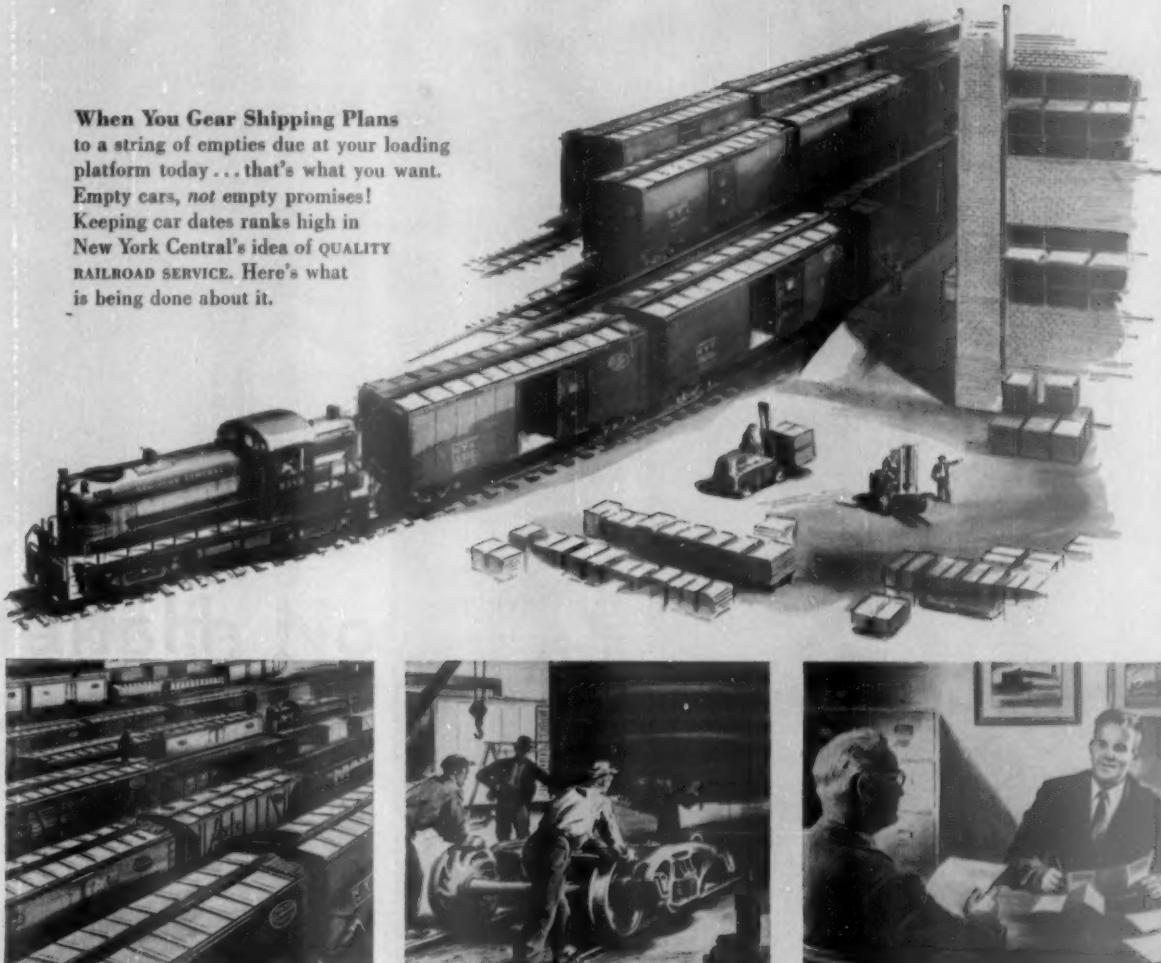
Board member Abe Murdock dissented; Albert C. Beeson didn't participate.

• **High Court Case**—The U.S. Supreme Court has dealt with the "hit and run" strike in one case. When the United Automobile Workers (AFL) used sporadic strike tactics against an employer, the Wisconsin Employment Relations Board ordered it to stop its "illegal" strike practices. After a long court fight, the U.S. Supreme Court ruled the board was free to rule as it did against sporadic walkouts—since T-H didn't specifically permit or ban them, the court held, the state board could legally curb "hit and run" practices.

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STRIKING WORKERS line up for benefits

## Hatters

If the faces in these pictures look weary, small wonder. The strike of the United Hatters, Cap & Millinery Workers International Union (AFL) against Hat Corp. of America in South Norwalk, Conn., is well started on its ninth month. Barring a miracle, the end is nowhere near in sight.



UNION OFFICER James Novaco, chief of Hatters' local: His concern is for workers left stranded in Norwalk, Conn., when the company moves some of its operations.



paid by union. They walked out because they feared Hat Corp. of America was about to abandon them.

## Strike in Norwalk Drags On

The company and the union are both hurting. So are numbers of other organizations and individuals in and around Norwalk. By this time, the whole community has become involved. The effects of the strike have hit the mayor, local businesses, and local workers who never had even the slightest

connection with the making of hats.

• Dispute—From the way it has been represented, you'd be justified in concluding that the dispute is a fight to the finish over a basic principle: whether a company has a right to determine where it will do business and to relocate its plants.

Actually, it isn't that simple. The background of the dispute has much in common with the history of every other long strike. Both sides have made mistakes. These, and each day the strike lasts, add to the complications barring a settlement.

The strike started in July of last year,



**EXECUTIVE** William Prowitt, secretary of Hat Corp.: Like other white-collar people of the company, he's helping out on the sorely undermanned production line.



**RETAILER** Thornton Fuller, executive of a Norwalk department store: He says the long-drawn-out strike has had little effect on the town's general economic health.



**MAYOR** Irving C. Frèese of Norwalk: He has had to use the police several times to quell picket-line violence; he fears more trouble can hurt him politically.

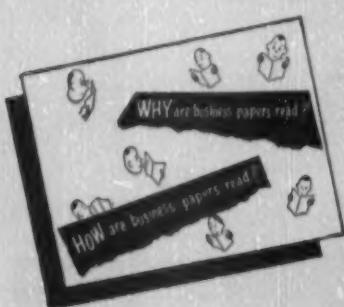


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though it had been brewing all spring. Hat Corp. candidly told the union before its old contract expired that it had some plans for opening a plant in Nevada, Mo. The company maintained that no one would be affected immediately. But it admitted that, in maybe 18 months, enough work would be moved to Missouri to affect perhaps 200 of the 1,500 Norwalk employees.

The union took alarm at the announcement. The company had earlier moved a part of its straw hat operation to Winchester, Tenn. The union feared the company intended, little by little, to move out of Norwalk altogether. But the company maintains that it has no intention of moving its basic operations from Norwalk—ever. On the contrary, it says it will continue to do all of its body-making work on felt hats there, and a good part of its finishing.

• **Make a Promise**—This reassurance did not quiet the union's fears. Nervous, it made big demands. According to the company, it asked for a long-term promise that Hat Corp. would not make a move affecting Norwalk workers. When the company countered with a proposal of six months' notice before making a move, the union took this as confirmation of a company effort to leave Norwalk. It snapped back, company officials say, with a demand that the company agree not to produce hats outside of Norwalk.

Whatever the union's first demands, it insists now that it does not question the company's right to move where it wants to or expand at its pleasure. The whole issue, says the union, is what the company intends to do about old and loyal workers who might be thrown out of work by any such move.

• **Walkout**—This was the status of the dispute when the employees walked out on July 9. Hat Corp. did not try to operate. Five months later, when there was still no sign of a break, the company reopened its doors. On Dec. 2, it started recruiting workers wherever it could find them.

From that point on, obstacles to settlement multiplied. Tension mounted. Little incidents were magnified. Mis-trust grew.

To date, relatively few strikers have returned to work. The union says 11, the company claims 30 to 50. Clerical workers, salesmen, and even a company executive are working on machines now. But most of the 500 workers making hats in South Norwalk now were brought in from other New England states. The union manages to talk a certain portion of all company recruits into going back where they came from. There has been some violence involved in the persuasion process, but not much on the whole.

• **Losses**—Hat Corp. has lost better

than \$5-million in sales already, and the employees are out paychecks running \$100,000 a week—less strike benefits of something like \$35,000 a week being paid by their union. The union itself is up to its ears in debt. It has borrowed \$250,000 from the International Ladies' Garment Workers' Union (AFL), and floated a \$500,000 bond issue (BW—Nov. 7 '53, p165). In addition to this, hat union members all over the country are being assessed some \$35,000 a week.

The towns of Norwalk and South Norwalk are fed up with the fight, but they have stood up well economically. There's no doubt that cutting off a payroll the size of the Hat Corp.'s is bound to affect business some. But the actual effects have been much less than might be expected.

Chief reason for this is that Norwalk is not a one-industry town. Hat Corp. probably accounts for less than 20% of the town's payroll, and a lot of Norwalk citizens commute to New York City to work. Diversified industry has probably done more to cushion the town from the effects of the strike than any other single factor. New branches of industry—represented by companies such as Remington Rand, Burndy Engineering, and Perkin-Elmer Corp. (optical instruments)—are moving in.

• **Tests and Measures**—Businessmen are understandably reluctant to admit that business is off too much because of the strike. Thornton Fuller, vice-president of Tristram & Fuller, one of Norwalk's largest department stores, says he has hardly felt the strike at all. The Chamber of Commerce reports that 1953 Christmas sales were up 6% over those of the preceding year. One bank reports savings up.

But a survey conducted in Norwalk by Group Attitudes Corp., a New York company handling a public relations program for Hat Corp., turned up some admissions of business setbacks. Big items like automobiles and TV sets have been hit the hardest, and installment buying is down. All businessmen are unanimous in wanting the strike over as soon as possible. Many citizens have told interviewers they think the company and the union are just being stubborn. But surprisingly few people unconnected with the strike are violently on one side or the other.

• **Interim**—The company is offering permanent jobs to those who replace strikers. Each day, the strikers know, there are fewer jobs available than there were before. Many former Hat Corp. employees have got permanent jobs elsewhere and don't intend to return. Since some of these are skilled workers, the company feels some of its personnel losses are already irrevocable.

The strikers themselves are being

paid \$25 to \$30 a week each in strike benefits, and some of them supplement this with part-time jobs. The strike hasn't brought real poverty yet. But the union's debts are mounting daily, and this money will have to be paid back after the strike is over. Balanced against this is some sentiment to keep the strike going; some workers may not have their Hat Corp. jobs when the strike is over.

The union has proposed arbitration, but the company says it will not arbitrate a management prerogative—meaning its right to open branches. The company thinks a secret ballot might reveal that most workers are fed up with the strike and want to return, so it has told the union it will make an offer if the union will agree in advance to put the offer to a secret ballot of the membership. The union refuses to do this until it knows what the offer is.

**• Attitudes**—Just how the membership does feel about staying out or going back is anybody's guess. And everybody in Norwalk is guessing. Some point to the fact that so few strikers have returned to work as clear evidence that the strike is still well supported by the membership. Others claim that fear of criticism from fellow workers, and lack of organization among those who would like to return, have kept down any back-to-work movement.

In many cases families are divided on the issue. Some employees now working at the South Norwalk plant have husbands, wives, or relatives who are out on strike. These workers claim the striking members of their families would vote to come back if a secret poll were taken. But strikers hanging around the union hall will tell you that most of the 1,500 out on strike are bitter and that none of them wants to come back until the company accedes to the union's job-security demands. The strikers say they're in too deep now to back out without a victory.

**• Suit**—A formal end to the strike may come as a result of a lawsuit now pending in Connecticut's Superior Court. Hat Corp. is suing the union. The company is represented by Walter Gordon Merritt, attorney who made his name years ago in the famous Danbury Hatters case—which had very unhappy results for labor. The corporation is seeking damages resulting from the strike, and also an injunction against the strike and against picketing.

The basis of the suit is the charge that the strike and picketing are illegal because they are based on an illegal demand: that the company agree not to produce hats anywhere but Norwalk. According to Merritt, the union's position is that the company has a right to move its operations and expand, but that the union in turn has a right to quit working and picket if the com-

pany does move. The company has won the first round of the suit. The court ruled that the complaint stated a good cause of action—if the company can prove the complaint is justified.

The union is expected to deny that it demanded what the complaint says it did. The union claims only to be asking for job security in Norwalk and for a chance to negotiate such issues as severance pay and job rates for new jobs that displaced persons may be assigned to.

**• Peacemaker**—Mayor Irving C. Freese of Norwalk has made frequent efforts to get the parties together. At this point he would like to lock both of them in a room—jury style—with a telephone and let them stay there until they can reach an agreement. Highest pressure on the mayor right now is coming from seasonal and part-time workers who claim the striking hatters are taking their jobs.

The mayor says the strike almost cost him his last election. He was forced to use city police to establish law and order on several occasions, and this aroused the ire of the hatters.

**• Bystander**—The Railway Express Agency in South Norwalk, also directly hit by the strike, is playing a strange and cautious role. It has had to lay off eight or 10 people, for the strike has cut into shipments to and from the Hat Corp. It also has fresh in mind the heavy damages it had to pay Montgomery Ward in a lawsuit for failure to service the company during its lengthy strike.

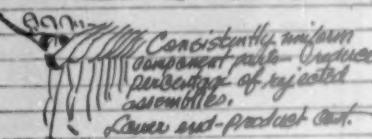
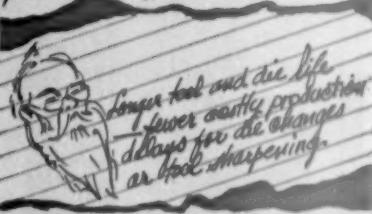
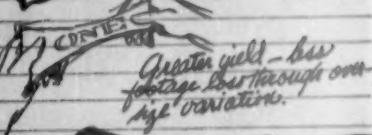
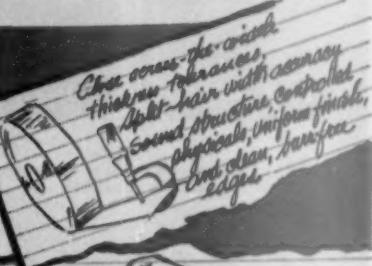
Its employees are unionized and won't cross the hatters' picket lines. So every day, to be sure it is carrying out its responsibility as a common carrier, the express agency sends a delivery truck to the hat plant for a pickup. The truck stops at the picket line. The driver refuses to cross it. All this is noted down meticulously in writing and sent to the home office of the agency. Meanwhile, Hat Corp. gets its own truck out, takes its hats down to the express company platform, and dumps them. The express agency has to handle them.

**The Pictures**—Aviation Week—74; Floyd Bright—118; Gordon Campbell Buzzell—158; Harry Compton—52, 53; Jerry Cooke—43; Don Cravens—124, 125; Martin Harris—130 (ctr., bot.); Bob Iscar—Cover, 52, 53, 106; Bern Kearing—27, 28, 29, 30, 31; Herb Kratovil—52, 53, 80, 81, 82, 83, 154, 155, 174; Jay Leviton—166, 167; Magnum Photos, Inc.—135; U.P.—100, 172; W.W.—134, 176.

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Particles of Soluble Coffee from exhaust of a spray drier are being collected in an AERODYNE similar to this unit.

## LABOR BRIEFS



Arthur Larson, 43, dean of the University of Pittsburgh Law School, was nominated this week as Under Secretary of Labor—highest unfilled position in the Eisenhower Administration. Larson, whose work will be mostly administrative, held prior government appointments in the Office of Price Administration and Foreign Economic Administration between 1941 and 1945.

Plant tours of Benjamin F. Fairless, board chairman of U.S. Steel, and David J. McDonald, president of the United Steelworkers (CIO), have now covered 80% of U.S. Steel's plants. Aimed at improving plant labor relations (BW—Nov. 14 '53, p176), the tours have already developed "impressive [evidence] that willingness to understand each other's problems can sharply reduce grievances and improve working conditions," the parties say.

Resignation of Daniel W. Tracy as president of the International Brotherhood of Electrical Workers (AFL) was announced by IBEW last week. Tracy, a member of the union since 1913 and its president since 1933, will be succeeded by J. Scott Milne, IBEW secretary-treasurer, on Apr. 15. Joseph D. Keenan, who has been secretary of AFL's Building & Construction Trades Dept., will succeed Milne.

A six-hour day will be sought by USW if industry "fails to provide full employment with the present eight-hour day," the steel union's president, David McDonald, told a Pennsylvania CIO meeting last week. It was the second mention of the shorter day by McDonald in recent weeks, but probably doesn't mean USW will make any real effort to win a six-hour day in what looks like tough bargaining in 1954.



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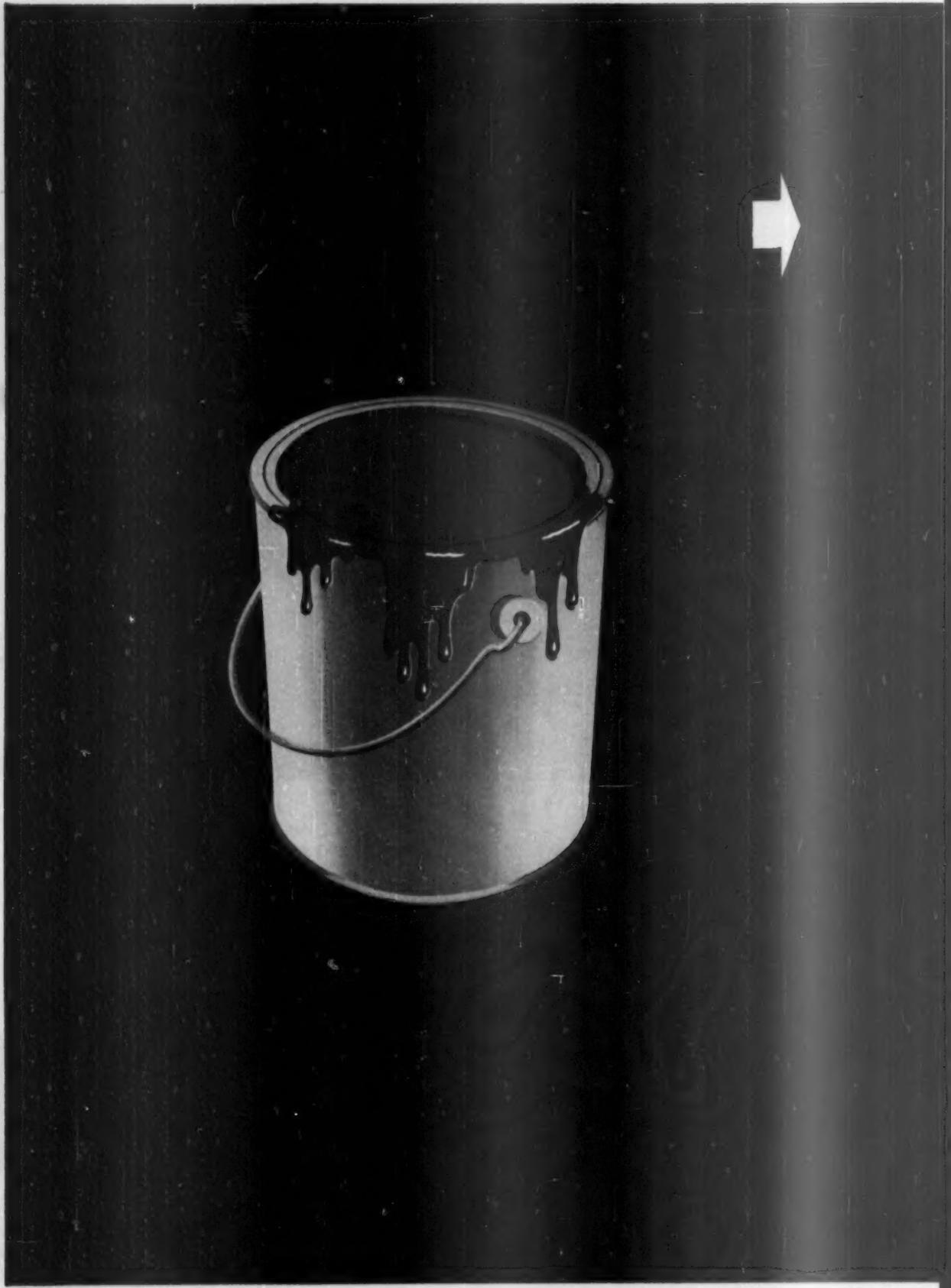
Another important feature is the long-term economy of this fine chair. Although it may be slightly higher in first cost than run-of-the-mill office chairs, it will outlast them by a matter of years...and keep its handsome appearance even longer.

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## **MOOD MAKER . . .**

Modern paints have far greater protection value, but, in addition, more and more attention is being directed to the psychological aspects of color . . . how it affects the scholastic standing of students . . . the prognosis of hospital patients . . . the efficiency of the office worker . . . the safety and production records of industrial workers. And a lot more paint is being sold.

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How all industry benefits  
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## Today they're giving freight a safer, smoother ride . . .

In a persistent effort to make good service even better, railroads have turned the spotlight on the causes and cures of lading damage. Lest someone get the impression that freight shipments are risky, here are some facts about an unusual record of achievement.

First, the number of claims has gone steadily down; total in 1952 was 39% less than five years ago. In terms of dollars, current loss is *less than one-fiftieth of one cent for each mile a ton is carried*.

The irreducible minimum hasn't been reached yet, of course. Railroads are working with shippers on better loading methods. They're developing impact-free classification systems; investing in better cars that ride smoothly at high speeds. For example, the modern Ride-Control® Truck, developed by American Steel Foundries, rides up to  *fifty times more smoothly* than the ordinary trucks of ten years ago!

But, over-all railroad progress is not traceable to any isolated development or to any single railroad. Continuous improvements, jointly made by railroads and suppliers alike, are making today's freight service better . . . and a bigger value than ever before.

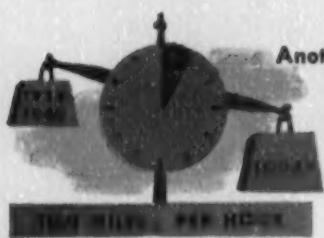
Freight is hauled smoothly and safely on the modern Ride-Control Truck. This truck was the first to permit passenger-train speeds for freight trains . . . at freight train costs.

## American Steel Foundries

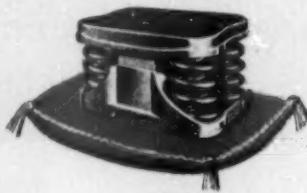
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Executive Offices: Wrigley Building, Chicago 11

### Another plus of modern railroading

Industry benefits from the efficiency of today's modern car pool. Average ton-miles hauled per train hour shot up 74% from the 1936-1940 period!



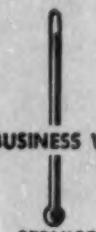
TON-MILES PER HOUR



Mechanical principles of the Ride-Control Truck are now built into the "Ride-Control Package" — which economically makes older cars suitable for high speeds, unrestricted use.

# PERSONAL BUSINESS

BUSINESS WEEK  
MAR. 27, 1954



A BUSINESS WEEK

SERVICE

Signs continue to point to a closer examination of your tax return this year. Latest is the fact that taxpayers are not getting refunds at the rate they did last year. That could mean a tighter check on claims.

It's wise to be prepared for at least some kind of examination of your return—whether or not you have claimed a refund.

But there's no reason for the prospect to alarm you. Taxpayers tend to feel an Internal Revenue Service notice to question their returns spells jail for sure. Unless deliberate fraud is involved, an error may actually mean only a readjustment of the final tax figure, plus 6% of the deficiency, at the most. And an examination might show that IRS owes you money.

Remember that your tax return is bound to go through some scrutiny anyway. The minimum is a check on the mathematical accuracy. Sometimes this is deferred, to be combined with an examination of income and deductions. When that's completed, the taxpayer gets a notice of any over-all deficiency or overpayment.

The same thing happens if you have a face-to-face conference—or several of them—with a man from IRS. The object is simply to get a correct tax figure, not to point the finger of guilt at you.

Take a hypothetical case: Richard Roe earned \$25,000 last year. Like many taxpayers, he made estimates for some of his deductions, even though he had doubts. But he filed his return and forgot about it.

IRS didn't forget: A letter arrived one day telling Roe his return would be examined. Roe was scared; he reasoned that those dubious deductions must be obvious to IRS. Now he was in real trouble.

He wasn't, of course. A reconstruction of what actually went on between Roe, his accountant, and the revenue agent would look something like this:

The agent first checks bank statements and canceled checks, finds them in order. But he stops at the savings-account passbook.

Agent: "You had interest of \$105 on your savings. You didn't report it."

Roe: "But I didn't get it until this year."

Agent: "I know, but you could have got it last year. As long as you had that right, it was income to you in 1953. We'll have to put that in. Now, what proof have you of charitable contributions?"

Roe: "Well, I have canceled checks for only \$126. The rest—\$74—were miscellaneous contributions. I have no record—just estimated them."

Agent: "That seems reasonable enough. O.K. Retail sales tax, \$750. Hmmm. Seems high, doesn't it?"

Roe: "That's 3% of my annual salary, and it seems fair enough that that is at least what I'd spend."

Agent: "Oh, no. First of all, after withholding, you take home only about \$20,000, at the most. Second, part of that take-home pay probably was spent for items on which there was no retail sales tax."

Roe: "I hadn't thought of that."

Agent: "It's a common mistake. I think a reasonable deduction would be \$200. Do you agree?"

# PERSONAL BUSINESS (Continued)

BUSINESS WEEK  
MAR. 27, 1954

The interview will follow roughly along those lines regardless of who is present—the taxpayer alone, or his lawyer or accountant representing him. Afterward, the tax is recomputed, on the basis of the new figures, and the taxpayer pays the difference plus 6% interest on it.

The theory is that the final figure is based on agreement between the taxpayer and IRS. If there is no agreement, the taxpayer can eventually go to court for a solution.

Thus the taxpayer is assured of every right and privilege—including figuring his tax to take advantage of all the law allows him.

It's important for all high-income men to understand this philosophy. An audit is automatic for all incomes of \$50,000 and over, an odds-on bet for those between \$25,000 and \$50,000.

—•—

The Broadway theatrical season has turned out to be unusually good—somewhat unexpectedly. Spring and summer visitors will have an attractive list to choose from. There's particular strength in nonmusicals.

Most of the hits will run through the summer. Others won't, for two reasons: (1) An unusual number have stars whose contracts expire around June 1; and (2) shows doing a profitable business now may not survive the traditional summer attendance slump. Here's the ticket outlook on shows almost sure to survive:

Toughest to buy seats for are Caine Mutiny Court Martial, Teahouse of the August Moon, and Ondine; brokers need several weeks' notice.

A few days' notice to brokers will get you tickets to such top attractions as Fifth Season; Oh Men, Oh Women; Seven Year Itch; Solid Gold Cadillac; Tea and Sympathy. Also, keep an eye on the fate of three new plays due to open during the next three weeks: King of Hearts; The Magic and the Loss; and Anniversary Waltz.

Brokers have tickets on short notice for all the solid musicals—Can-Can; Girl in Pink Tights; Kismet; Wonderful Town. Two new musicals due soon are By the Beautiful Sea, starring Shirley Booth, and Pajama Game.

—•—

Every home craftsman knows the headache of trying to fasten mitered joints accurately. Rocco Products, Inc., has a new corner clamp with a design that, it claims, assures greater accuracy. Key feature is two separate locking jaws, one for each piece, which permit adjustment for error.

Called the Norton Corner Clamp, it sells for \$3.95.

—•—

**Note for hunters:** Remington Arms Co. has put the first 410-gauge autoloading shotgun on the commercial market. It has a four-shot capacity, weighs a little over 6 lb., has an over-all length of 45½ in.

Experts say this fills a longtime demand for a gun of this type. It's good for both beginners and experienced gun handlers. The standard model retails for \$110.45.

—•—

There's a new restaurant credit plan—The Golden Key System, Inc. Life membership costs \$15. Your identification is a small gold key, with your registration number engraved on it.

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## **PERIMETER PATROL**



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**Here Are Some Surprising Facts About the Serious Shortage of High-Salaried Executives**

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SURPRISING as it may seem, the really big jobs today are the hardest to fill—and the easiest to get. Men who can handle top-management jobs can now choose from any number of openings that pay \$12,000, \$15,000, \$20,000, or more.

It was J. K. Lasser, famous business and tax expert, who went after the facts about this scarcity of qualified men for high-salaried jobs. Polling the heads of companies in many fields, he consistently heard from them the same answer. What men in the middle brackets need to make the high-salary grade, these men told Mr. Lasser, is a general, well-rounded knowledge of business procedure.



J. K. LASSER

#### Gives working methods of top men

This simple answer gave Mr. Lasser an idea for a brand-new plan that would literally lead men out of the \$5,000-\$10,000 plateau and into the top jobs. He found the foremost managers every field to have working methods that have brought success in marketing, public relations, accounting, budgeting, insurance, and "know-how" in every business procedure for top management.

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In this book you learn streamlined methods of distribution, how to design systems for internal control of business, how to control operations through budgeting, how to avoid business frauds, how to cut paper work in half—to mention only a few helps. Men who truly want to get ahead can ready themselves for the next step up with this **HANDBOOK**.

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Send me Lasser's **BUSINESS MANAGEMENT HANDBOOK** for 10 days' examination on approval. In 10 days I will remit \$8.50, plus few cents for delivery, or return book postpaid. (We pay for delivery if you remit with coupon; same return privilege.)

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## COMMODITIES



ONE CUSTOMER to 250 salesmen is a pretty good ratio, particularly when Uncle Sam is the

## An Auction-in-Reverse

Last week about 250 lumbermen (picture) from all over the country swarmed into the Biltmore Hotel in Atlanta, Ga. They were there to attend a three-day auction. But unlike most auction goers, they left their money bags at home. Reason was that they were there to sell, not to buy. And their customer was the U.S. Corps of Engineers, which buys lumber for all the armed services through a sort of auction-in-reverse deal.

The Corps of Engineers has been the centralized lumber buying agency since 1949—making it the biggest single purchaser of lumber in the world. At last week's auction—the 43rd—the Engineers bought about 25-million bd. ft. of lumber for the military services. As these auctions go, it wasn't a big one—par is about twice that much. Even so, somewhere around \$3.5-million worth of lumber changed hands.

• **Big Business**—Over-all the Corps has purchased about \$501-million worth of lumber for the military since 1949. The major part of this came from the West Coast through the standard invitation to bid procedure. The trouble is that while this procedure works fine when there are relatively few big producers who can submit bids for huge amounts (as on the West Coast), it produces chaos in a market where there are a large number of small producers, as in the South.

For example, one of the first lumber procurement jobs, at the outbreak of World War II, was the purchase of 200-million ft. of lumber for four Army camps. The usual invitations to bid went out—and the bids came flooding in. More than 250,000 prices were submitted; 30 government accountants worked night and day to sort out the bids. Before they were through, two



buyer. That's how the competition lines up when Engineers Corps uses . . .

## to Buy Lumber

large filing cases were filled with data just on the lumber purchases for these four camps. It took so many weeks to reach the award stage that when successful bidders were notified, most of them had already sold the stock on which they had made their bids.

**Cutting Red Tape**—It became all too apparent that a new buying system was needed, and it was out of this situation that the auction system was devised. Here's how it works:

Each of the services—Army, Navy, Air Force, and Marines—turns over its lumber requirements to the Corps in requisition form. These are sorted out according to lot size and delivery destination and become the invitations to bid. When the Corps has accumulated orders for lumber running well up in the millions of board feet, it sets up an auction.

Two weeks before the Atlanta auc-

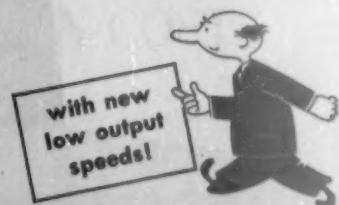
tion, about 500 lumbermen—producers, wholesalers, and brokers—were notified of the government's intent to buy. They were shipped a bundle of 400 different invitations to bid on lots of lumber ranging from 15,000 bd. ft. to 250,000 bd. ft. They were also notified that bids would be accepted only at the Atlanta auction. About half of those invited showed up.

In figuring bids, lumbermen must be sharp with a pencil. The government buys f.o.b. delivered. So, to figure what he should bid, the seller has to know his weights, freight rates, taxes, mill costs, and packaging requirements and costs.

There was more apprehension than usual at last week's sale. Government buying is down sharply; on an over-all monthly basis, the Corps has been buying about 40-million ft. less than it was a year ago. In addition, lumber prices

# REEVES

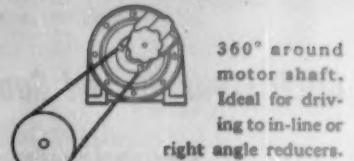
## Flexi-Speed Drive!



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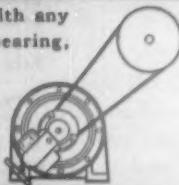
Speed control handwheel may be located in 8 positions perpendicular or parallel to motor shaft.

### Drives In Any Direction



### 8:1 Speed Range

May be used with any standard ball-bearing, foot-mounted motor of  $\frac{1}{2}$ ,  $\frac{1}{4}$  or 1 hp. 300-4800 rpm output speeds.



### Low Cost

This versatile variable speed drive assures maximum production, efficiency and economy from your machines. Write today for details. Specify Dept. 95c.

REEVES PULLEY COMPANY • COLUMBUS, IND.

**REEVES**  
Variable Speed Drives



...invitations to bid were numbered and worked on in order . . ."

LUMBER starts on p. 166

are down from last year, while the price of timber has remained the same. The feeling of boom times was very definitely missing.

• **Procedure**—As each lumberman checked in at the Atlanta auction, he showed his mandatory \$5,000 bid bond. He was then given a bidder's number, a handful of bid slips, and was ready to go to work. Sitting down at one of the many long tables, he spread out his invitations, freight rate books, pencils, slide rule, rabbit's foot, and cut plug. He was ready for the auctioneer.

At 9 a.m. C. V. Claycomb, Chief of the Procurement Branch, Atlanta District Corps of Engineers, took over. Claycomb has been running the auctions since their start, and figures the amount of board feet of lumber that he has bought for the government way up in the billions.

The invitations to bid were numbered and "auctioneer" Claycomb worked on them in order. When he called for bids on invitation No. 1, the lumbermen filled out a bid form and held it aloft. Messenger girls took the bids to Claycomb's table, where his two buyers examined them for correctness and noted the prices. Claycomb read out the lowest—and successful—bidder's name, his bid, and the next lowest bid. Unsuccessful bidders—and this is an important feature of the auction—then got a chance to shade their bids the next time around.

On invitation No. 1, the contract was awarded to bidder number 121—Redwine Bros., of Fayetteville, Ga. Its bid was \$59.80 per 1,000 bd. ft. lumber. The next lowest bidder was 7¢ more than Redwine's price.

The whole process of awarding this contract took just a few minutes. Through the rest of that day, and for two days following, invitations and bids were handled at a rate of better than 20 per hour. And once the successful bid was read, it became a firm contract binding both the bidder and the government. Even though the seller had no definitive contract in his hands, he could call his mill to begin filling the contract immediately.

In case of identical bids—which happened several times an hour—the bids were crumpled up and tossed into the air. One of the assistants picked one, and the lucky bidder got the contract.

• **Challenge**—Sometimes a bidder got challenged on his price. When one of the buyers felt that a bid was so far below the market price that the bidder

## Which part jumped production 250% and cut costs 25% at the same time?

The self-tapping screw at left, used in a fluorescent light fixture, cost \$12 per thousand. It was replaced by the *cold-formed* Milford screw at right—which costs only \$9 per thousand. More important, the Milford screw is being set automatically in less than one-third the time!

Net results? Seven assemblies are now completed in the time that used to be needed for two! And annual savings in the cost of parts run well over five figures!

## COLD FORMING and Good Design turned the trick!

Hundreds of manufacturers have found that Milford cold-forming and technical know-how really pay off—BIG! The cost of small parts and the expense of installing them is one of the few areas in which sizable savings can still be made—and there are two very sound reasons why Milford can help you make them.

First, Milford cold-formed parts cost far less because you don't pay for metal you don't get—and because they can be produced far faster. They're made from wire stock—without scrap or waste—on very high-speed equipment.

Second, Milford engineers, designers and product researchers are expert in re-designing your small parts to take full advantage

of cold-forming economies and to permit faster and more efficient methods of installation. The men from Milford can also help you increase production through the use of modern high-speed power tools or special automatic rivet-setters, a field in which Milford has had broad and intensive experience over a period of many years.

Since you risk nothing, and stand to gain a great deal, why not put Milford to work for you? Let Milford show you how to reduce costs and save time through the use of cold-formed parts. Most important, call us in on the new products you're planning before designs are frozen. You'll be taking the high road that can lead to very substantial savings—in both time and money.

Write or phone nearest Milford Plant or Sales Representative!



**MILFORD RIVET & MACHINE CO.**

MILFORD  
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NORWALK  
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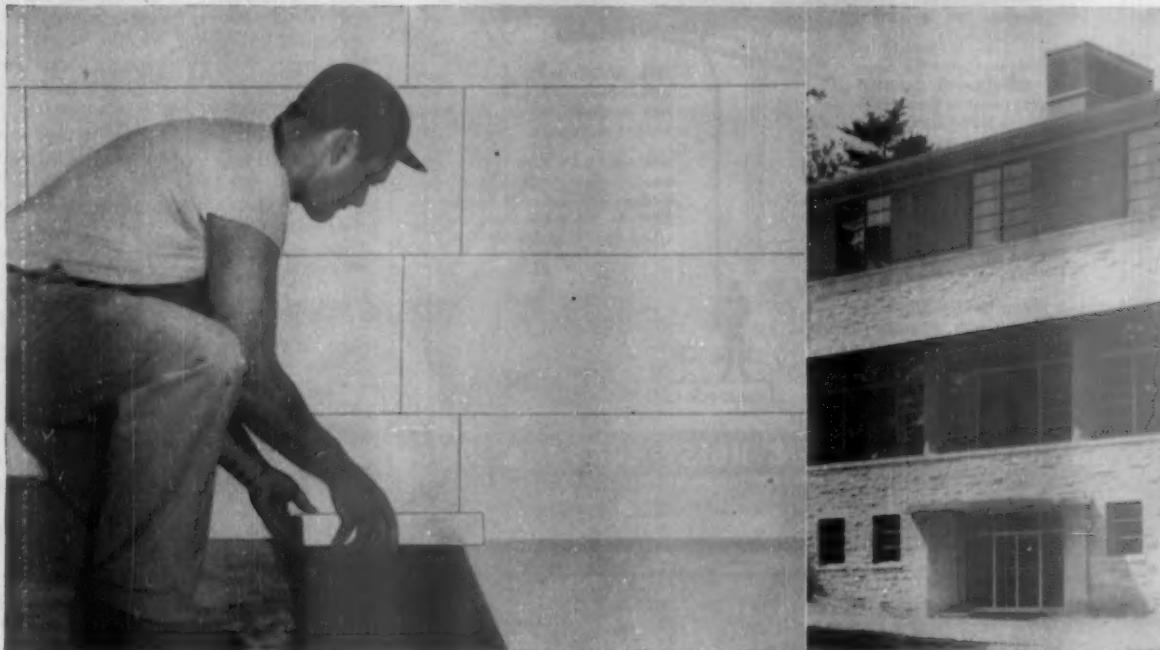
ELYRIA  
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AURORA  
ILLINOIS

HATBORO  
PENNA.

Dow

## EASY-TO-WORK STYROFOAM INSULATION SAVES TIME, CUTS INSTALLATION COSTS



*Architects, Eggers & Higgins, New York City—Contractor, Eastern Cold Storage Insulation Co., Inc.*

### STYROFOAM low-temperature board insulation installed in eight refrigerated rooms at Manhattanville College

THE DOW CHEMICAL COMPANY  
Plastics Sales, PL 686A  
Midland, Michigan

Please send me your booklet containing information  
on Styrofoam low-temperature insulation material.

Name \_\_\_\_\_

Title \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

The insulation project at Manhattanville College of the Sacred Heart, Purchase, New York, involved a total of eight refrigerated rooms. Easy handling, cleanliness and speed were important since the areas were busy and confined. Styrofoam rigid low-temperature board insulation was chosen because it met all the required specifications with these added advantages:

- Low "K" Factor • Odorless • Resistant to Rot and Mold
- Exceptional Water Resistance • Long Insulation Life
- Available in Standard Sizes • Easy to Install
- Light Weight • Low-Cost Installation, Maintenance, Operation

This is just one example of how Styrofoam helped solve a tough insulation problem. If you are investigating insulation for low-temperature rooms, insulated vehicles, refrigerated equipment, pipe covering or perimeter insulation, contact your Dow sales office for the name of your nearest distributor. Or write THE DOW CHEMICAL COMPANY, Plastics Sales, Midland, Michigan.

*you can depend on DOW PLASTICS*



# Industrial

## Underhung CRANES

feature Forged Steel Wheels  
with Hardened Treads



Consistent with the company policy of constant improvement in their products, the Industrial Crane & Hoist Corporation provides FORGED STEEL WHEELS with HARDENED TREADS on Industrial Underhung Model Cranes. This improvement combined with other exclusive "Industrial" features will assure longer service life and lower maintenance costs.

Industrial Underhung Cranes are equipped with patented "Industrial" removable head axles, heavy duty ball and roller bearings throughout, roller chain flex-

ible couplings, enclosed gear drive operating in sealed oil bath, and jig-assembled, jig-bored all-welded end trucks.

Industrial all-welded cranes are available in single and double girder types with capacities up to 20 Tons and are the outstanding crane buys in industry today.

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337 NORTH ADA STREET

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Overhead Cranes • Jib Cranes • Monorail Systems • Crane Runways  
Representatives in Principal Cities

How  
do you  
feel about  
leaning  
ladders?



If you're human, it's likely that you've been tempted, at one time or another, to put superstition to the test. But—you probably decided not to walk under that ladder on the theory that it's better to let well enough alone. If you acted the same way in business . . . if you didn't feel compelled to know the always changing facts about production, markets, methods and all the rest . . . you'd have trouble in bunches. Take an hydraulic press, for instance. If your business uses presses, you ought to know something about them . . . how they can profit you. Find out about a Wood press—and be pleasantly surprised. You owe it to your stockholders. Ask for descriptive catalog.

R. D. WOOD COMPANY

PUBLIC LEDGER BUILDING • PHILADELPHIA 5, PENNSYLVANIA  
Representatives in Principal Cities

MAKERS OF HYDRAULIC PRESSES AND VALVES, FIRE HYDRANTS,  
CAST-IRON PIPE, GATE VALVES, GAS PRODUCERS, ACCUMULATORS

may have made a mistake, he asked him to verify his figures. At this point, the bidder could withdraw, but could not change his bid. One low bidder was challenged when his bid was more than \$9 below the next lowest. It developed that he had a lumber yard right next to the delivery point. Another bidder, also consistently low, was trying to get rid of an accumulated inventory.

Here's how Ethyl Miller, sales manager and treasurer of the M. C. Miller Co. of Cle Elum, Wash., figured one invitation called for 30,000 bd. ft. of 4 x 4 timber, 12 ft. or longer, delivered to Camp Polk, La. Her mill base was \$65 per 1,000 ft. Weight at the mill was 2,800 lb. and the freight rate was \$1.21 per 100 lb. Adding tax, delivered price came out to \$99.89 per 1,000 bd. ft. But if she were to ship kiln-dried lumber, the weight would be down to 2,500 lb. thus reducing the price to \$96.25. Miss Miller shaved a penny off this to keep from being on the nickel—her method of knocking wood. She got the award—was 86¢ under the nearest competitor.

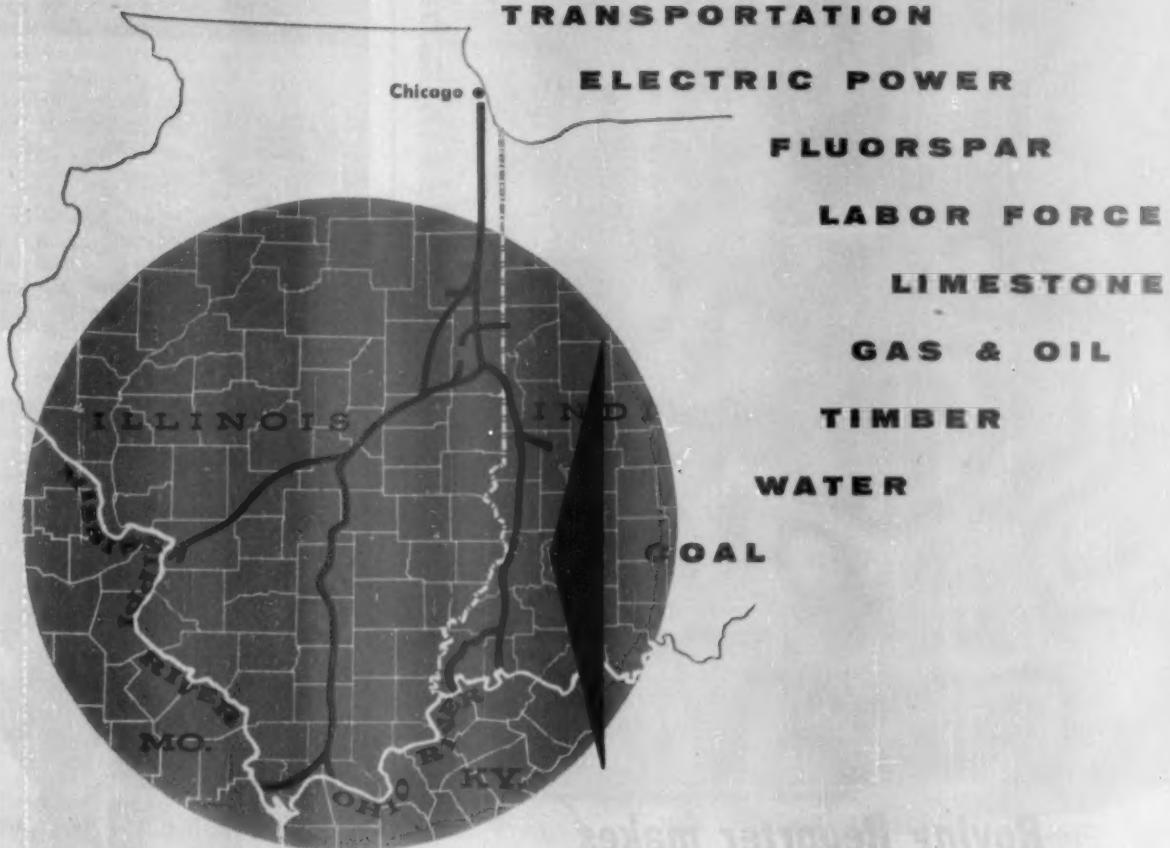
• **Mercurial Market**—The auctions, which are held several times a year, help to set the general market level. Lumbermen check each other carefully on prices and keep a close record of successful and next lowest bids.

But sometimes the system can and does drive down the market price. That's just what happened at the Atlanta session. One lumberman, faced with a high inventory and some past due notes at his bank, had to move his stock. So his bids were \$3 to \$5 per 1,000 ft. under his competitors.

By midafternoon, the prices had dropped so sharply that a number of lumbermen withdrew from the bidding to complain about the state of the market. As it neared closing time, prices began to turn back upward. But by this time the level had been pretty well established and more than 5-million bd. ft. of lumber had been sold at an average of \$3 per 1,000 ft. under the prevailing market rate earlier in the day.

• **Payoff**—Despite the stiff competition though, lumbermen like the auctions. For one thing, they get their business quick. They claim that no place else in government business can a seller wind up with a contract within 10 min. after he writes out his bid.

What's more, they're sure of getting some government business—if they want it badly enough. Since the start of the coordinated buying program in 1949, some 30%—or a \$150-million slice—of the government's lumber has been bought through auction. And the thousands of small lumber mill operators throughout the country would probably have lost out if they'd had to depend on the conventional invitation to bid procedure.



**write for complete data  
on these industrial  
advantages along the C&EI**

ask about the tremendous coal supply and the oil from wells and pipelines in this Indiana-Illinois region.

ask about the millions of kw capacity available from private utilities . . . new stations under construction.

ask about the natural resources . . . the abundance of limestones, fluor-spar, dolomite, sand, silica; also timber.

ask about the large, experienced labor force and the harmonious labor-management relations that exist.

ask about the proximity to major markets and the railroads, barge lines, river-rail transfers and highways.

For factual information on the outstanding industrial opportunities in this Indiana-Illinois area, write in confidence to Chief Economist:

**CHICAGO & EASTERN ILLINOIS RAILROAD**  
332 SOUTH MICHIGAN AVENUE, CHICAGO 4, ILLINOIS





Photographed underwater at Miami Beach by Reeca Films

## Roving Reporter makes Patapar underwater test

Newspaper reporters take nothing for granted when it comes to hot news. And this fellow dramatically proved to himself that Patapar Vegetable Parchment *really* does have an almost unbelievably high WET-STRENGTH. You can soak Patapar for hours and hours — you can even boil it — but it still stays strong.

### Patapar resists grease too

Patapar resists the penetration of fats, oils and grease just as effectively as it stands up in water. These qualities make it ideal as a food wrapper and for many other uses. And — Patapar is NON-TOXIC.

### Some of Patapar's many uses

Patapar is produced in different types of variations that meet all sorts of

exacting requirements. Some of its diversified uses: wrappers for butter, poultry, margarine, ham, bacon, cheese and other moist foods; milk can gaskets; rubber releasing separators; white print translucent masters for direct print machines; dialyzing membranes; in hospitals for wrapping articles to be sterilized in live steam. It is furnished in rolls or sheets, plain or beautifully printed with colorful designs.

In your business perhaps there is a job that could be done better with Patapar. Tell us about it, and we will send information and testing samples of the type of Patapar we recommend. Write today.

PATERSON PARCHMENT  
PAPER COMPANY  
Bristol, Pennsylvania  
West Coast Plant:  
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Sales Offices: New York, Chicago

**Patapar**  
Vegetable Parchment  
HI-WET-STRENGTH • GREASE-RESISTING

HEADQUARTERS FOR VEGETABLE PARCHMENT SINCE 1885



Army's Undies Float ...



... Keep Out Wind

Plastics are launching a new invasion of the Army. This time it's the "Coldbar" suit, whose foamlike material is worn under field jacket and trousers. It is claimed that the Coldbar is both buoyant and windproof, that a soldier wearing it can remain afloat, and even be able to work, for a short time in freezing waters.

The pictures show test conducted with enlisted men from 91st Engineer Construction Battalion at Fort Belvoir, Va. In the upper picture, the soldiers slosh and thrash around in the winter-chilled waters of the Potomac. Back on land (below) they shake off the water as easily as a hunting dog. Right there is where the windproof angle comes in, when there's a real bite in the air.

The Army hasn't decided yet whether to adopt the Coldbar suits. There will be other tests before the formal verdict will be reached.



*"You see POWELL VALVES everywhere!"*

Not surprising when you realize that Powell makes more kinds of valves and has probably solved more valve problems than any other organization in the world. And this has been going on since 1846.

Wherever flow requires dependable control,

there's the place for Powell Valves—available through distributors in principal cities. Made  $\frac{1}{8}$ " to 30" and 125 pounds to 2500 pounds W. S. P. Bronze, iron, steel and corrosion resistant alloys. On problems, write direct to The Wm. Powell Company, Cincinnati 22, Ohio.

CONTROLS FOR THE LIFE LINES OF INDUSTRY



**Powell Valves**

108th  
year



Two 30 ton, 75 ft. span Bedford magnet cranes with 15 ton bucket auxiliaries working over the cinder yard—used as skull crackers in Detroit Steel Company's mill at New Boston (Portsmouth), Ohio.

## Bedford Cranes are individually engineered

In steel mills, power plants and throughout heavy industry, wherever superior performance is expected, experienced owners are enthusiastically recommending Bedford cranes.

Further proof of the superiority of Bedford cranes is found in the high percentage of repeat orders from important owners through the years.

Built to the most modern standards and backed by more than 52 years of specialized crane building and utilization experience... Bedford cranes have won fame the world over for ad-

vanced design and for safe, smooth, dependable performance.

Available in all types and sizes . . . from 5 tons to 350 tons, and up, for all kinds of indoor and outdoor services . . . each Bedford crane is individually engineered and precision built for its specific application.

You are invited to consult a Bedford engineer on your next crane problem . . . with all the facts on the table we believe you too will make your next crane a Bedford.

(Write for complete catalog describing Bedford Cranes in detail.)



FILTER TIPS, biting more and more deeply into "regulars," are creating a . . .

## Field for Fibers

Cellulose-acetate and cotton—cigarette filter ingredients—are cashing in on trend to filter-tip smokes.

As the controversy rages over the effect of smoking on health (BW-Dec. 5 '53, p58), textile fiber producers smile sympathetically at their cigarette-manufacturing brothers. But smile they do, for the talk is booming filter tips—and filters mean textile fibers.

So far, two fibers have been used in cigarette filters: cellulose-acetate and cotton. In terms of total consumption of both fibers, the new market is still a baby. But it's growing at a healthy clip. While total cigarette consumption dropped in 1953, consumption of filter tips—and of the fibers that go into them—more than doubled over 1952. Filter tips' share of the cigarette market went up from 1.6% in 1952 to 3.4% in 1953.

- **Long Run**—It's a sure bet that this growth will continue throughout 1954. Filter-tip producers are selling all they can make—and they say that lack of machinery is the only thing holding them back from making more. This month, R. J. Reynolds Tobacco Co., second biggest tobacco company, announced that it's jumping on the filter-tip cigarette bandwagon. This leaves American Tobacco Co., the biggest, as the only one of the majors without a filter-tip smoke—and American is known to be experimenting with filters. Small wonder that fiber producers are eying this market with a hungry look.

- **Ingredients**—What kinds of filters do

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H. L. Green Company, Inc., New York, buys, and through its chain of 221 variety stores sells more than 30,000 items. Getting copies of price lists, merchandising information, promotion calendars, sales bulletins, etc., to its store managers requires a lot of paperwork duplicating which must be done quickly and accurately.

Since installing XeroX® copying equipment, H. L. Green gets "hot" merchandise information to store managers *three days quicker* than formerly. Preparing paper masters by xerography for duplicating price lists, bulletins, etc., eliminates the work of five typists, assures photographic accuracy, and saves about \$800 a month.

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*For use in diazo type machines, translucent intermediates can be made from any original subject in the same speedy way.*

There is no limit to the versatility of the dry, electrostatic, direct positive xerography process in paperwork duplicating applications.

\*A TRADEMARK OF THE HALOID COMPANY

**WRITE** for proof of performance folders showing how companies of all kinds are cutting duplicating costs with xerography. For instance: Piasecki Helicopter Corporation saves \$1,185 a month and vital time in preparing offset paper masters by xerography.

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*The fastest, cheapest, most versatile way to make masters for duplicating*



Your business insurance program courts disaster when it fails to reflect changing economic conditions.

## JOHNSON & HIGGINS

INSURANCE BROKERS — AVERAGE ADJUSTERS

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Chicago • San Francisco • Los Angeles • Detroit • Cleveland • Philadelphia • Pittsburgh • Buffalo  
Seattle • Wilmington • Vancouver • Winnipeg • Montreal • Toronto • Havana • London

# Elliott ADDRESSING MACHINES

offer you the only competition you can find in the Addressing Machine industry.

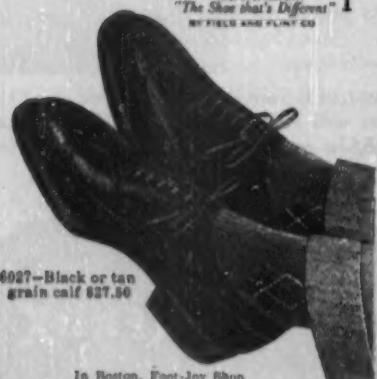
Consult your yellow telephone book or write to The Elliot Addressing Machine Co., 151A Albany St., Cambridge 39, Mass.

### clues

are business opportunity advertising in BUSINESS WEEK

the ultimate in fine shoes...

**Foot-Joy**  
ESTD. 1850  
"The Shoe that's Different"  
BY FIELD AND FLINT CO.



6227—Black or tan  
grain calf \$27.50

In Boston, Foot-Joy Shop  
In Chicago, Al Robbins • In Los Angeles, Blaney's  
In New York, Foot-Joy Shop, 417 Madison Ave.  
write for free booklet  
FIELD AND FLINT CO., Brockton 68, Mass.

## Factory Clearance Sale!

### Brand New Bookcases

Only  
**\$595!**  
ea.



Your choice of  
beautiful fin-  
ishes:  
Walnut, Ma-  
hogany, Ma-  
ple, or Blond  
Natural.

These are fac-  
tory seconds  
with almost in-  
visible imper-  
fections but the  
value is ter-  
rific!

36" high 24" wide 3 shelves

Extremely sturdy construction, SOLID heavy select  
1/2 in. western lumber throughout, beautifully  
finished for den, office, or living-room. Ideal for  
books, toys, encyclopedia, etc. . . .

Shipped completely assembled, ready to unpack  
and use. Money back AT ONCE if you are not  
thoroughly delighted! Prompt delivery.

Free Delivery Anywhere  
on orders of two or more. Send check or money  
order. Order one, two, or a dozen!

**SOUTHLAND BOOK CO.**

1113 HORD ST., DALLAS, TEXAS

from \*

### OFFICE MANAGER

to

### GENERAL MANAGER

yes, that is the calibre of the per-  
sonnel available to your organiza-  
tion through BUSINESS WEEK'S  
classified advertising section.

### clues

the cigarettes use? Brown & Williamson's Viceroy (the leader among filter cigarettes) and Liggett & Myers' L&M use an acetate filter made by Tennessee Eastman. TE—which jumped into the filter game early and is now the leading producer—makes a tow of fibers (a long rope-like affair) consisting of 20,000 acetate filaments, each about half the diameter of an average human hair. The 20,000 fibers is what gives Viceroy its advertising slogan of 20,000 filtering surfaces.

P. Lorillard Co.'s Kent uses a blend of acetate, cotton, and a mineral fiber, a kind of asbestos, called crocidolite. Benson & Hedges' Parliament uses cotton alone. Only the inner circle knows yet what the Reynolds filter is going to be; at midweek the company was still keeping it a closely guarded secret.

In all, a little more than 3-million lb. of acetate fiber went into filter cigarettes in 1953—about 1% of total acetate production for the year. About 335,000 lb. of cotton were used in filters.

• **Guesswork**—Of course, a lot of questions remain to be answered about filters. The arguments (in private and in the advertising) over which is the best fiber or blend of fibers are long and loud. Cigarette makers are handicapped by the fact that they still don't know what they want to take out of the smoke. Filters take out tars and nicotine, but which—if either—is harmful? Another controversial item is whether you get better filters with fibers laid parallel, as in Viceroys and L&M, or in random directions, as in Parliaments and Kents.



### Strike Victim

More than 36,000 bbl. of whiskey spent a day on the Philadelphia docks this week, as longshoremen staged a "holiday" in sympathy with the International Longshoremen's Assn. strike in New York.



# To the Employee Relations Director of every American company

**LET'S FACE IT . . .** the threat of war and the atom bomb has become a real part of our life—and will be with us for years. Fires, tornadoes and other disasters, too, may strike without warning.

The very lives of your employees are at stake. Yours is a grave responsibility. Consider what may happen.

When the emergency comes, everybody's going to need help at the same time. It may be hours before outside aid reaches you. The best chance of survival for your workers—and the fastest way to get back into production—is to know what to do and be ready to do it. To be unprepared is to gamble with human lives. Disaster may happen TOMORROW. Insist that these simple precautions are taken TODAY:

**Call your local Civil Defense Director.** He'll help you set up a plan for your offices and plant—a plan that's safer, because it's entirely integrated

with community Civil Defense action:

- Check contents and locations of first-aid kits.** Be sure they're adequate and up to date. Here again, your CD Director can help—with advice on supplies needed for injuries due to blast, radiation, etc.
- Encourage personnel to attend Red Cross First Aid Training Courses.**
- Encourage your staff and your community to have their homes prepared.** Run ads in your plant paper, in local newspapers, over TV and radio, on bulletin boards. Your CD Director can show you ads that you can sponsor locally. Set the standard of preparedness in your plant city. There's no better way of building prestige and good employee relations—and no greater way of helping America.

*Act now . . . check off these four simple points . . . before it's too late.*



# clues: TO THE SOLUTION OF MANAGEMENT MEN'S PROBLEMS.

Published every week—closes 12 days in advance. Rate—\$5.85 per line (\$2.98 per line for positions wanted ads), minimum 2 lines. Allow 5 average words as line; count 2 words for box number. Write for special rates for Business Services advertisements. Address box number replies c/o BUSINESS WEEK to the office nearest you. NEW YORK, 330 W. 42nd St., CHICAGO, 520 N. Michigan Ave., SAN FRANCISCO, 68 Post St.

## EMPLOYMENT

### Selling Opportunities Offered

**Manufacturers' Agents wanted for line of Casters.** We are now in the process of building a nationwide sales organization and are interested in representatives who are now selling production hardware items to manufacturers. Lakeside Casters, Inc., 1978 E. Allis St., Milwaukee, Wis.

**Factory Representative wanted for nationally advertised line short-run stampings and plastic.** Must understand dies and stampings. This is a main line, but companion lines allowable. You will represent an established manufacturer of highest quality short-run stampings; generous commission paid; exclusive territory. Harvey Vogel Mfg. Co., 2577 Como Ave., St. Paul 1, Minn.

### Positions Wanted

**Industrial Editor, Extraordinary Qualifications** and flexible schedule, in a position to handle all phases of employee publication (or other communications) for firm preferably located in N. England. PW-2053, Business Week.

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**CFO—Attorney: Harvard, MBA, Diversified** experience, internal control, taxes, accounting, insurance. Age 38. Objective—treasurer or controller. PW-2126, Business Week.

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## BUSINESS WEEK

Classified Advertising Division 330 W. 42nd St.—New York 36, N. Y.

## COMMODITIES BRIEFS

Oil and natural gas reserves in the U. S. are at an all-time high, according to a joint report of the American Petroleum Institute and the American Gas Assn. Despite peak production rates in 1953, proved reserves of petroleum stood at 34.3-million bbl., and of natural gas at 211.4-trillion cu. ft. at the end of the year.

The wheat belt faces the worst storage problem it has ever had. Grain elevators are bulging; government officials are renting deserted buildings to try to take care of the influx. As it looks now, they won't be able to get enough space, and a lot of wheat will be piled up on the ground with the advent of harvest time.

A number of precious metals, all in the platinum group, have come down in price. Last week Baker & Co., a leading platinum refiner, announced a \$6 price cut—to \$84 an ounce wholesale. Iridium and ruthenium were also reduced. A week earlier, the company dropped the price of palladium \$2 to \$3 an ounce—the first price cut for palladium in at least 15 years.

Texas Railroad Commission has raised the state's allowable production rate for oil for the second straight month. The April allowable will be 3.1-million barrels daily—up 73,000 barrels daily from March. Inventories of most major oil products are comfortably low, but gasoline stocks have reached flood proportions.

Secretary of Agriculture Ezra Benson boosted the 1954 U. S. sugar quota by 200,000 tons last week. Raw sugar prices have been fairly high; after Benson's announcement, they started to come down.

A new synthetic rubber called—believe it or not—monochlorotrifluoroethylene fluorocarbon elastomer, has been developed by the Army. The rubber, says the Army, is nonflammable and tough. The Army says it also has strong resistance to corrosive chemicals and strong acids.

Sales of rayon tire cord to rubber companies, which dropped sharply in the fourth quarter of last year, are still very slow. Tire manufacturers bought heavily during the first part of last year, and right now they're still working off inventories.

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## Ideas in Bloom

The pulse of business, like a young man's heartbeat, always quickens in the spring (p. 27). And business problems, which have plagued us all winter, seem less pressing—if only for a moment. Whether it is the change of climate or some change in man himself, we are inclined to let our fancy run free as we turn to dreams of what might have been or what might be.

There are a few souls who really get up in the clouds and hatch wonderful sounding solutions that, at first sight, have all the freshness and attraction of the season's budding flowers. Here are a few culled from this spring's crop:

• Harry Ruscher, a Bronx (N.Y.) businessman, fears that family life is threatened by financial blight. Today, he says, a young couple establishes a home on debt, and then the wife must leave home and go to work to help pay for it. But when the firstborn arrives, his "infant cries give voice to . . . economic despair. . . ."

Let's get rid of despair, cries Mr. Ruscher, who offers his own solution: Up exemptions for children to \$1,200, and exempt the first \$800 of newlyweds' income. Solvent families, he states, are good customers.

• Then there is the plan of a small businessman, who worries that our small retailers and factory owners are losing out to both big business and big government. His plan: Start a mutual insurance scheme for small business. Members would pay premiums and if they wind up a year in the red, could file claims and receive compensation.

• James A. Deering, an insurance broker, offers a gruesome but painless plan to reduce our national debt. He suggests that the government take out \$25,000 insurance policies on the lives of approximately 11-million citizens in the 18-to-22-age bracket. Paying the premiums out of current revenue, the government would receive \$25,000 at the death of each insured, and when all this group are dead, around \$275-billion will have been paid back to the Treasury. Enough to pay off our present debt and then some.

• Another debt-reducing idea concerns the dollar bill. Obviously, only one side of the bill currently has a function, for serial numbers and all other data are on the front. So why not rent out the other side to advertisers who'll be guaranteed broad circulation?

We don't approve any of these ideas, but we can't be too harsh with them either. After all, when spring is in the air, there's something plausible about the most illogical day dreams. Sooner or later, we'll have some ourselves.

## Defense Against Decline

The steps that businessmen can take to help avert serious economic decline are spelled out in a new study by the Committee for Economic Development. It

recommends that business and government work together to reduce the chances of economic crisis.

In suggesting that both these forces can strengthen our defenses against decline, the CED does not mean that all fluctuations can be smoothed out. On the contrary, it makes clear that no attempt should be made to interfere with temporary or local fluctuations within an industry. These adjustments are inevitable. What is neither inevitable nor healthy are the "deep and dragging" over-all declines that we suffered from in the past.

We have already made great strides toward preventing these destructive drops, according to the CED. It observes that our defenses are already strong, and have reached the point where "what in early circumstances might have turned out to be a severe depression would be a moderate depression and what might have been a moderate depression can now be relatively mild."

To bolster further the defenses against depression, the CED recommends strengthening the network of automatic stabilizers, such as unemployment insurance. In general, it suggests using flexible and indirect policies. But if an emergency occurs, it strongly recommends the use of such direct and powerful instruments as across-the-board tax cuts, a public works program, and direct aid to business. CED warns that government must be just as careful of "doing too much too soon, and causing inflation," as of "doing too little too late."

### What Business Can Do

Businessmen can strengthen our economy, as CED sees it, by "doing better the things they already do well," such as developing new products and processes. But it makes plain that the biggest room for improvement lies in the things "they have not done so well in the past."

It specifically recommends that businessmen develop more stable inventory and investment policies—which have been the major causes of recession. On the investment side, it proposes that business plan more carefully, concentrating on long-run growth prospects rather than short-run economic swings. As for inventories, CED feels that business should keep them at a minimum level for efficient operation.

CED advises businesses to learn to keep their financial houses in order, for "the corporation that has a balanced capital structure with adequate equity and a comfortable debt service is a good candidate for either current borrowing or term borrowing if it wishes to take advantage of its credit."

If these things can be done CED is confident that "our economy can achieve its high potential without violent fluctuations." And there can be other advantages. The strengthening of business defenses will do more than avert serious declines. It will mean that government intervention in the affairs of business can be kept to a minimum.

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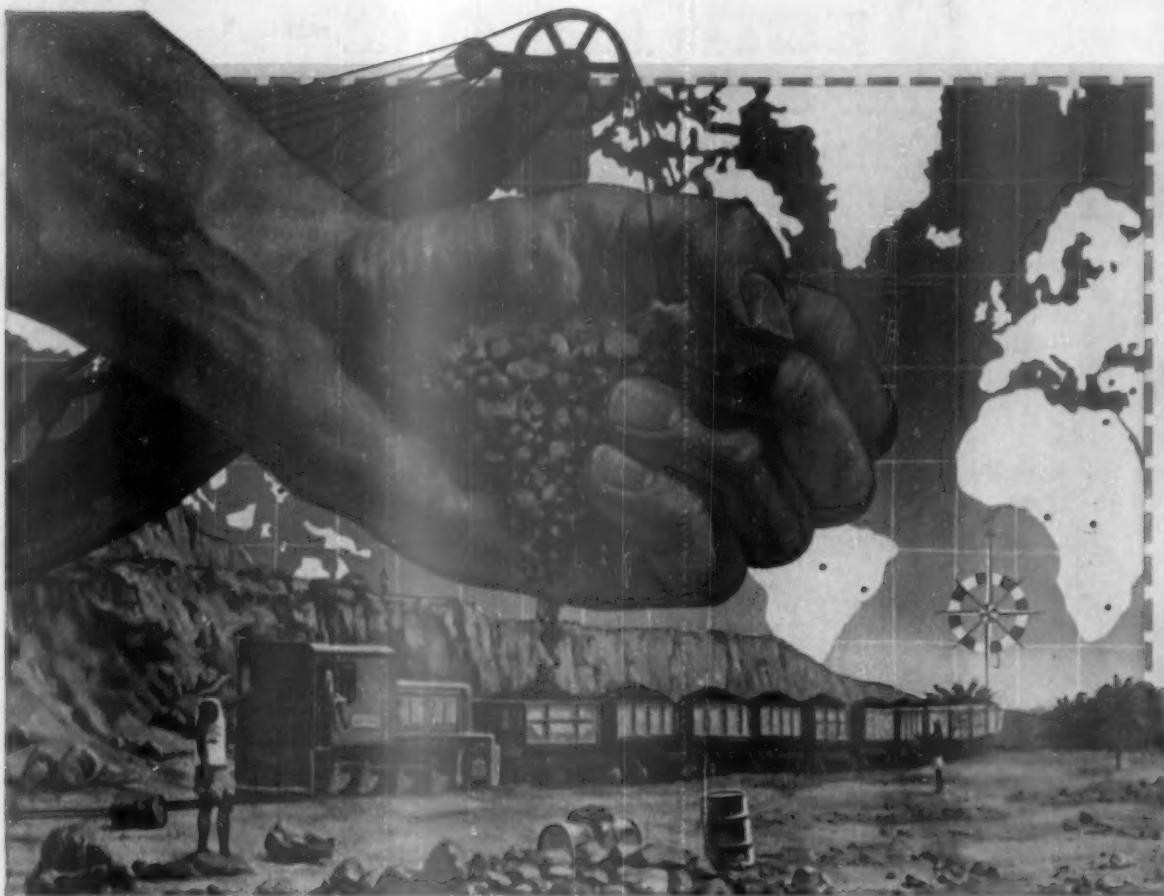
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HAYNES STELLITE Alloys  
UNION Carbide

UCC's Trade-marked Products include  
NATIONAL Carbons  
PYROFAX Gas  
EVEREADY Flashlights and Batteries  
ACHESON Electrodes  
PREST-O-LITE Acetylene  
BAKELITE, VINYLITE, and KRENE Plastics  
PRESTONE Anti-Freeze

SYNTHETIC ORGANIC CHEMICALS  
DYNEL Textile Fibers  
LINDE Oxygen